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STRATEGY RESEARCH PROJECT

DECISION MAKING FOR THE STRATEGIC LEADER

BY

LIEUTENANT COLONEL GEORGE E. RECTOR, JR. United States Marine Corps

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Decision Making for the Strategic Leader

by

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ABSTRACT

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Decision-making is a process whereby a leader, when confronted with a problem, selects a course of action or "solution," from a set of possible courses of action. Since there is generally some uncertainty about the future, we cannot be sure of the consequences of the decision that is chosen. Soundness and timeliness in decision making depend to a great extent on the method used. This is a creative process, connected with the search for the new and best means of successful accomplishment of the mission. Inasmuch as the process is basically creative and cognitive in nature, the most important requirement on the process for making a decision is its correspondence to dialectics, the theory of knowledge, logic, and the principles of military art.

The achievements and conclusions of such sciences as psychology, mathematics, and cybernetics can be of great assistance to the commander making decisions today. His mission, consequently, is to master logical and mathematical methods of thinking and cognizing developed by modern science. Decision-making during the "Information Age" has become an enormously complex undertaking. There has been an increasing tendency to turn to quantitative techniques and models as a potential means for assisting the decision-maker. The purpose of this paper is to describe the decision making process from a simple systems approach to a more complex and dynamic approach; focus on the essence of the decision making process--making the decision; and to provide a representative sample of quantitative techniques for making decisions as a strategic leader. It is hoped that this paper will serve as a basis for a course that will assist future senior leaders in the process of decision-making and may act as a connecting force between the analytical techniques on one hand and the recognitional techniques on the other.

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"During an operation decisions have usually to be made at once: there may be no time to review the situation or even to think it through. Usually, of course, new information and reevaluation are not enough to make us give up our intentions; they only call them in question. We now know more, but this makes us more, not less uncertain. The latest reports do not arrive all at once: they merely trickle in. They continually impinge on our decisions, and our mind must be permanently armed, so to speak, to deal with them. If the mind is to emerge unscathed from this relentless struggle with the unforeseen, two qualities are indispensable: first, an intellect that, even in the darkest hour, retains some glimmerings of the inner light which leads to truth; and second, the courage to follow this faint light wherever it may lead."

For many years, military theorists have had difficulty describing how leaders process information and reach decisions. Clausewitz described the process as "flashes of almost automatic intuition rather than being the product of a lengthy chain of reasoning." The only apparent explanation for many theorists was the leader's experience.

Clausewitz, Sun Tsu, and other theorists place a high value on recognition or intuition, however, no one has truly mastered a model of the decision making process used by successful leaders. Military leaders and most business managers have embraced the more comprehensible and popular analytical process. The dilemma is that the military emphasizes and teaches analytical decision making, but often operates in an environment where uncertainty, tempo, and flexibility require faster recognitional or intuitive decision making. Leaders must understand the recognitional decision making process and the military must learn how to explain it.

In the past 25 years, researchers have studied decision making and developed theories about how leaders are able to make recognitional decisions. The majority of this research has dealt with non-military decision makers—chess players, fire fighters, and corporate executives. There are, however, some studies conducted in an education and training environment with war gaming and simulation.

Making decisions is a creative process, connected with the search for the new and best means of successful accomplishment of the mission. The creative nature of decision making arises from the fact that any forthcoming engagement will be organized in new, changed circumstances, and it is never an exact copy of a previous engagement. The process of making a decision often takes place when time is limited, and the success of the decision made depends greatly on the clear-cut organization of work of the leader and his staff.

Different methods have been developed over the years to support and simplify decision making. In the Department of Defense, senior decision makers have grappled with the difficulty of comparing seemingly different alternatives, such as air lift versus sea lift, or attempting to establish priorities among diverse missions such as Special Operations, Air Operations, or precision guided munitions. Processes have been developed and applied to assist decision makers through these issues in a systematic fashion.

This paper examines current theories of decision making originating from the fields of psychology, cognitive science, political science, and management science. The objective is to present an approach to decision making for the military leader which concentrates on what many decision researchers call "behavioral decision theory," specifically focusing on recognitional decision making. Recognitional decision making relies on a leader's intuitive ability to recognize the key elements of a problem and arrive at the proper decision—replacing analysis with experience and judgment.

THE DECISION MAKING PROCESS

"During the past several decades, the "managerial revolution" has changed the status of management from amateur to professional....Management can no longer fly by the seat of its pants; it must use instead more accurate instruments, and vastly improved techniques.... Quantitative techniques are, therefore, much in vogue. Nevertheless, there is still room for the inspirational hunch, though backed today by probability theory decision making. Happily, too, most managers still regard people as more important than things. A place exists for the social or behavioral specialist, as well as for the accountant."

This section is based on the premises and perceptions of Coventry and Burstiner (quoted above), and is an attempt to develop them in a systematic way in order to help future leaders understand their primary task—making decisions. As we are exposed more and more to the studies and new texts on management and decision theory, it is apparent that, as a result of our highly competitive, complex, and resource-scarce environment, we must focus on better management techniques and we must develop and educate our leaders in the use of these new techniques.

The act of deciding is one of first becoming aware that possible alternatives exist and leads into the entire process of making lesser decisions to be applied throughout the fundamental procedural steps. John Dewey is credited with perhaps the most succinct decision making process:

- What is the problem?
- What are the alternatives?
- Which alternative is best?⁴

Those three questions may have been enough for early practitioners, but they have been expanded upon today with more thorough, methodical procedures, coupled with quantitative and

qualitative techniques to ensure the inquiry is conducted correctly. Others have gradually enlarged upon Dewey's fundamental decision steps to make more complete procedures.

"Confronted with a task, and having less information available than is needed to perform that task, an organization may react in either of two ways. One is to increase its information-processing capability, the other to design the organization, and indeed the task itself, in such a way as to enable it to operate on the basis of less information. These approaches are exhaustive; no others are conceivable. A failure to adopt one or the other will automatically result in a drop in the level of performance."

An expansion of Dewey's fundamental decision process was developed by retired Air Force Colonel John Boyd and is known as the "OODA Loop." The OODA loop applies to any two-sided conflict, whether the antagonists are individuals in hand-to-hand combat or large military formations. OODA is an acronym for observation-orientation-decision-action, which describes the basic sequence of the decision making process (see Figure 1). According to the model, when faced with a decision, first, observations are made of the situation—that is, information is

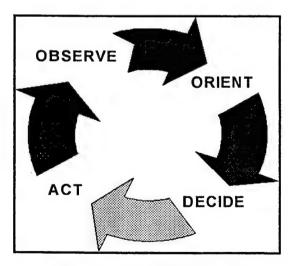


Figure 1. The OODA Loop

gathered about our status, our surroundings, and our foe. Having observed the situation, we next orient on it—we make certain estimates, assumptions, analyses and judgments about the situation in order to create an accurate mental image. Based upon the orientation, we decide what to do—

we come up with a plan. Then we put the plan into action. This includes supervising to ensure proper execution and monitoring results. This takes us full circle to the observation phase. Having acted, we assume the situation has changed, and so the cycle begins again.

Figure 2 represents an organization with multiple parts, having multiple OODA Loops spinning simultaneously, although not at the same speed and intensity, as each leader makes decisions at his or her own level.

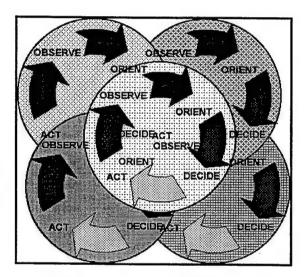


Figure 2. Networked OODA Loops

A more complex model of an open decision making system, depicted in Figure 3, shows a systems analysis approach with many of the factors, both internal and external to the environment, that affect the decision. This open system recognizes and permits interactions of components to take place across the boundaries of the system. It is realistic, much more complex, and therefore more difficult to control or analyze. "The real goal of a systems analysis approach is to teach decision makers to think in a special, orderly, and thorough way." Decision making is more than formulas, map boards, computer displays, and decision aides; it is the ability to use them

creatively and to rely on both quantitative methods and human judgments about problems and opportunities. A model is one of the essential parts of systems analysis. A description of the critical steps inherent in this model follows Figure 3.

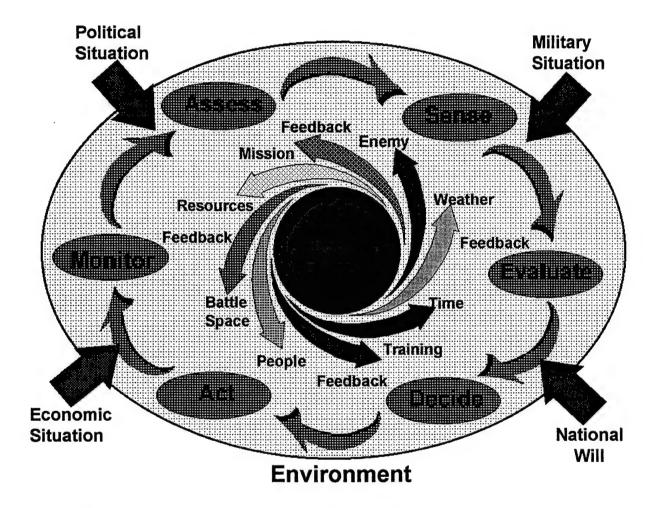


Figure 3. Complex Decision Making Process: "Systems Analysis Approach."

Let me use a personal example from the 1997 Army War College Strategic Crisis Exercise to describe this decision making cycle. Assigned the role as Chairman, Joint Chiefs of Staff during a futuristic scenario of global instability, with two near simultaneous medium-intensity regional conflicts and several other minor trouble spots, I was faced with the difficult task of prioritizing

the situations around the world and allocating forces to satisfy the needs of the theater CINCs. I began by assessing or diagnosing the problem from a global perspective. My staff, in conjunction with the service staffs and the CINCs' staffs, began the process of reducing uncertainty and developing the situation in each theater, in order to paint the overall picture for the National Command Authority (NCA). This allowed the NCA to prioritize the crises and weigh them against national interests. Concurrently, we were sensing the environment for information to reduce uncertainty and the theater CINCs were developing their alternatives and associated measures of effectiveness. My staff was also developing alternatives on a broader, global scale and using national interests as the criteria for measuring effectiveness. Next came the process of evaluating the alternatives. My staff, working closely with the service staffs and communicating with the CINCs' staffs began evaluating the alternatives using effectiveness and cost criteria that had been cooperatively developed by all three staffs. The next step involved a series of meetings and briefings with the National Command Authority, making recommendations to the President and setting priorities so that the President, with consensus of the NCA, could decide among the alternatives, thus satisfying our national interests. I was then able to put the plans into action, having gained consensus of the NCA and approval of the President. From that point, my staff moved into the verification phase, monitoring the actions of the CINCs as they carried out the plans for each crisis.

There are many factors, internal and external to the system, that affect the final decision.

Factors in the decision makers environment, such as readiness, training, resources, people, and time affect the decision, as well as, external influences such as the political situation or national will. This systems analysis approach is the author's attempt at "putting it all together." Once we

master the elements, tools and techniques of decision making, we must come back to this systems analysis approach, because it allows us to combine qualitative or analytical methods with recognitional or intuitive methods to make optimal decisions.

ELEMENTS OF DECISION MAKING

"Becoming a good decision maker is like becoming a good athlete. You need to examine the process of decision making systematically. You need to know how each part of the process contributes to an excellent decision, and know the errors associated with each part."

The decision making process contains four "key elements" that a strategic leader must recognize, practice and comprehend. Mastery often defines an exceptional leader. "Framing, gathering intelligence, coming to conclusions, and learning from experience" are the fuel that makes the process work. And, just as Russo and Schoemaker stated above, "you need to...know the errors associated with each part." Appendix B contains an excerpt from the introduction to Russo's and Schoemaker's book, Decision Traps, The Ten Barriers to Brilliant Decision Making and How to Overcome Them. It briefly describes the ten "decision traps" to which most decision makers are susceptible.

Framing The Picture

Framing means considering the viewpoint from which they look at the issue and deciding which aspects they consider important and which they do not. 11 This is an attempt to simplify the environment. When making a decision, you seldom have and you simply cannot consider all the relevant information. Therefore, you must adopt a mental structure in which to simplify and organize the information that you or the members of your staff have gathered.

"Strategic leaders do not necessarily think in terms of knowledge or information. They think in terms of ideas or images—mental 'pictures.' An image is the embodiment of our knowledge or understanding of a given situation." Our image of a situation is based not solely on the facts of the situation, but also on our interpretation of those facts. It is based not only on available

information, but also on our individual cognitive processing of that information—our intuition, appreciation and judgment, which in turn are the product of our proclivity, preconceptions, training, and experience."¹²

We generate images from our own observations as well as from information we receive from others. In general, the higher the level of command, the more we must rely on others for our information and the less we rely on our own observations. Any but the smallest unit commander receives most of his information by proxy—reports, updates, summaries. This causes several problems. First, uncertainty is inherent in any situation. When we observe a situation firsthand we have an intuitive appreciation for the level of uncertainty—we have a sense for the reliability of the image. When we receive the information secondhand, we lose that sense. This is especially dangerous in the "Information Age" since impressive graphic displays appear infallible and convincing. Second, we intuitively sense more about a situation from firsthand observation than we can convey to others. Third, since each of us interprets events and information differently, that information which is communicated to others has passed through our own "filters"—our biases, preconceptions, and experiences—and is distorted to one degree or another with each echelon through which it passes up or down the chain of command.

For example, in a combat situation, a commander needs to be able to frame his picture from essentially three separate perspectives. "The first is a "close-up" of the situation, a feel for the battle which he can gain effectively only through personal observation and experience. From this, the commander gets the physical and moral state of his subordinates. It is from this viewpoint the commander gets a sense of what he can demand of his people and what he cannot. The second perspective is an "aerial" view of the overall situation, from which the commander makes sense of the relative disposition of forces. Much of the information which goes into creating this image

comes from higher headquarters. The third perspective is the operation as seen through the eyes of the enemy commander, from which the commander tries to uncover enemy intentions and anticipate enemy moves. Of the three perspectives, the first is clearly the most realistic, but may offer a very narrow field of view. The commander who focuses only on this portion risks losing site of the "big picture." The second view provides an overall image, but lacks critical detail—it simply does not capture the reality of actual events on the battlefield. The commander who focuses only on this portion risks being out of touch with reality. The third perspective is largely a mental exercise limited by the fact that we can never be certain of our enemy's future actions. A strategic leader must overcome the tension between the perspectives and use them as the frame in which he places his picture."

Gathering Intelligence or Sensing

make a decision. ¹⁴ Once the situation has been framed, the objective defined, and assumptions made clear, it is time to move from the formulation or assessment phase to the sensing phase. Sensing is dependent upon a definition of the *right* problem or the *correct* opportunity, else all steps which follow will obviously be in pursuit of the *wrong* ends. It is here that the decision maker, much like an automobile mechanic, is faced with the problems of diagnosing the initial situation—the cause of the problem, the objective which, if attained, will fix it, and the uncertainties and assumptions which must be dealt with to proceed. It is in this phase that the crucial step of localizing and limiting the problem is essential to coping with it, i.e., *diagnosing*

the problem. Uncertainties enter the picture again and again from the point of isolating the problem and determining the objectives, all the way through quantitative and qualitative judgments, not ending until the decision is made.

If uncertainties are recognized and admitted, the inquiry can be properly initiated. Using a systematic process encompassing both analytical and recognitional techniques, a decision maker can reduce risk to an acceptable level. The primary purpose of this systematic approach is to advise the decision maker in determining the *best* possible alternatives to the *correct* question, in sharpening his intuition and adding to his basis for judgment, and then in exposing and exploring uncertainties.

Coming to Conclusions

Coming to conclusions means following sound procedures, a systematic approach, rather than relying on intuitive judgment alone. Suppose your frame captures the essence of your problem. And you've collected excellent intelligence. Will you make the best choice? Not always. Too many people pose their question carefully, collect their intelligence brilliantly, but then 'wing it' when it comes to actually deciding. He had a decision maker relies exclusively on intuition, his mind processes the information automatically and quickly, but not necessarily aware of important details. Intuitive decisions seldom take proper account of all of the information available.

Intuitive decisions are affected not only by the information that should affect the choice, but also by factors such as fatigue, distractions, experiences (good and bad), and the environment. On the other hand, intuitive decision making can take into account knowledge that the decision maker possesses but cannot put into words. And the human mind can process information in a more complex and subtle way than can be formulated in a decision rule.

In addition to intuition, a good decision maker uses other approaches to making choices. The use of decision rules or criterion for selecting among alternatives has proven to be an effective method of choosing. The primary task is to choose from among alternatives, using an appropriate criterion selected as a decision rule. The alternative chosen must agree with the objective and it must be predictable; that is, the alternative must illuminate what the consequences would be if it were selected. Evaluation is the result of ranking alternatives according to criterion decided upon by the decision maker.

Learning From Experience

Learning from experience involves learning from past decisions, keeping track of expected outcomes, studying the process, analyzing what you've learned. Sun Tsu recognized the value of experience, as he wrote "...when those experienced in war move they make no mistake, when they act, their resources are limitless. Napoleon wrote, "Commanders-in-Chief are to be guided by their own experience or genius...generalship is acquired only by experience and the study of the campaigns of all great captains. When all is said and done, it is really a leader's ability to see things simply, to identify the situation within his bank of experience, and decide quickly the optimum desired outcome. Learning from experience isn't automatic. It requires profound skills. Experience provides only data, not knowledge. It offers the ingredients for learning. Leaders can only turn it into knowledge only when they know how to evaluate the data for what it actually says.

Robert Glasner from the University of Pittsburgh was instrumental in describing the structured knowledge base that differentiates novice from expert decision makers. Glasner claimed "the outstanding performance of experts is derived from how their knowledge is structured for processing." ²⁰ Experienced decision makers were found to have a detailed, specialized knowledge base in their mind, particularly organized for rapid retrieval and application to a recognized problem. "[They] develop the ability to perceive large meaningful patterns and to do so with such speed that it appears almost intuitive."

BEHAVIORAL DECISION THEORY

The paper's focus will now shift to what behavioral scientists call "behavioral decision theory." Specifically how decision makers actually behave. Many theories exist as to how human beings make decisions. The approaches we choose must be consistent with our philosophy of command and will reflect the processes, procedures and decision aids we adopt.

As mentioned earlier, the traditional view is that decision making is an *analytical* process, based on generating options, identifying criteria for evaluating those options, assigning values to the evaluation criteria, rating each option according to the criteria, and tabulating the scores to find the best option. As a result, analytical decision making tends to be methodical, complex and time consuming. Theoretically, experience is not necessary to effective analytical decision making; only reasoning power.

A second approach is called *recognitional* decision making. This approach relies on a commander's (and his staff's) intuitive ability to recognize the key elements of a problem and arrive at the proper decision. This approach replaces analysis with experience and judgment. Recognitional decision making focuses on situational assessment, as opposed to the analytical approach which focuses on generating multiple options. Recognition works on the assumption that, due to the judgment gained by experience, the commander will generate a workable first solution, and therefore, it is not necessary to generate multiple options. Recognitional decision making is generally much faster than analytical decision making. In this mode, the subjective qualities of the commander play an important role, especially those such as skill in foreseeing the course of the forthcoming engagement, mature intuition, strong will, boldness and decisiveness, cunning, skill in deceiving the enemy, independence, the capacity for creative thought under great

psychological stress, and readiness to take a sound risk and accept the outcome of the operation. Combat and training give evidence that if the commander does not have such qualities and at the first difficulty vacillates long and agonizingly, then no well-developed methodology will help him make decisions.

Each approach has strengths and weaknesses, and which model is better in a given situation depends on the nature of the situation, particularly on how much time and information is available. The analytical approach may be more appropriate for mobilization, prehostility, or contingency planning, when time is not a factor. It may also be well suited for training and developing young, inexperienced leaders. The recognitional approach is clearly more appropriate for the fluid, rapidly changing conditions of war, when time is a critical factor.

In addition to the analytical and recognitional approaches, there are a wide variety of "hybrid" approaches or blends of the two that fill the spectrum available to the decision maker. A good decision maker does not have to use all of these methods, but knowledge of various methods will contribute to success. Just as a quarterback has a play book from which to choose, a successful decision maker should be aware of alternative decision methods.

The Dialectical Method. From the very beginning of the thought process of making a decision, it requires that the decision maker base his thinking primarily on objective facts, the actual circumstances; correctly evaluate those facts from a quantitative and qualitative standpoint; and consider them in close interrelation, continuous development, and change. The decision maker must discover the main factors having a decisive influence on the successful accomplishment of the mission, i.e., he must see beyond external influences to the essence of the engagement.

When this method is used, it is especially important for the decision maker to consider the situation dynamically in terms of the changes and development of the course of battle. Only with this approach will he be able not just to react to the situation, but develop it—actively influencing the operations of his troops in the course of battle and, through them, influencing the enemy. It is easier for military leaders with the gift of foresight to develop and make a decision quickly.

When the decision is being made, the combinations of theoretical methods of logical thinking such as analysis and synthesis, abstracting and generalization, induction and deduction, analogy and comparison are extremely important.

Analysis and Synthesis. By breaking down the mission into stated and implied tasks, and the general situation into individual elements, analysis enables the commander to master each of them more thoroughly and to discover the main events and set aside the secondary ones. The method of analyzing the situation is inseparably connected with synthesis, which makes it possible to combine the results of estimating the individual elements of the situation obtained in the analysis process into a unified whole, which is especially important when making the decision in terms of its elements.

Induction / Deduction. Analysis and synthesis are used in making decisions in close combination not only with each other but also with such methods as induction and deduction. Induction helps the commander to use isolated, at times insignificant facts about the combat situation, to arrive at general conclusions. Deduction, on the other hand, enables one, using knowledge of the general principles of conducting combat operations, to make judgments about individual phenomena in combat reality. Conclusions made by the inductive method of thinking are always verified by the deductive method and vice versa. Induction and deduction,

consequently, are just as necessarily related to each other as synthesis and analysis. Let me demonstrate with a simple example.

A commander received reconnaissance data that in the vicinity of an intermediate objective, there were a number of special vehicles under reinforced guard. On receiving this information, and knowing the enemy's order of battle and doctrine, he immediately assumed by induction that an enemy air defense unit had arrived in the area, but what kind? The deductive method helped him answer this question. For this purpose, he had the intelligence officer plot the concentration on the map, compared it with a doctrinal overlay of the general structure of the enemy's defense, and established that it was within 10 Km of the forward line of the enemy. Knowing the general principles and norms of enemy employment of air defense, he concluded that a section of ZSU-23 anti-air guns was being deployed in the area.

During the Gulf War, commanders used the same methods to determine the structure of Iraq's strongpoints from individual entrenchments and fire points and to determine the command and control structure from the operation of individual radios.

Abstracting and Generalization. The roles of abstraction and generalization are especially important in more complex situations where it is necessary to move away from the mass of information about the situation and concentrate on what is most important and decisive for the present moment. The process involves setting yourself apart from the situation—"stepping away from the map"—allowing you to consider the situation from a broader perspective. From this perspective you can generalize or "wargame" the situation in your mind in order to place it in the appropriate frame. Framing the image allows you to prioritize important tasks and information. However, discovering what is most important is not a simple task, especially since much information on the situation may be lacking, and part of it will be false.

Analogy and Comparison. Analogy and comparison can be of great assistance to the commander, its essence being a comparison of available information with previously known cases and finding the required conclusions for the present and future situations. Analogy and comparison most closely model reflective decision making because of the reliance upon the decision makers experience and intuition. A leader creates the image of the current situation and compares that image to those in his memory to assist his decision making process. The products are generally conjectural and occur in the form of hypotheses, because the situation is nonrecurrent, and one engagement never completely replicates another. Ignoring this fact and routinely duplicating previous operations can lead to failure. On the other hand, creative consideration of the changes in the situation and looking for what is new promotes success.

Intuitive-Heuristic Methods. A description of a commander's method of thinking in making the decision would be incomplete without addressing intuitive-heuristic methods. In recent years a great deal of attention has been given to them. In essence they are a question of the capacity of the commander to make a decision without detailed analysis or intermediate stages in his thinking process and without thinking through all of the situation elements in sequence. In other words, these methods are based on the ability of the commander to "see" the decision, to draw a fast, comprehensive conclusion, to select what is most important from the mass of initial situation data, and immediately arrive at the final result—the decision.

These methods are most clearly exhibited in decision making during the course of combat, when there is a need for the commander to react quickly to changes in the situation. They are based not only on the subjective qualities of the commander, but primarily on his thorough knowledge of the objective laws of combat, the principles of military art, solid mastery of the dialectical methods of thinking, and great practical experience. Consequently, they in no way

contradict the logical methods, but supplement and complement them in an integral decision making process. In addition, they are closely connected with the psychological state of the commander, his inspiration, mood, and the mobilization of his will and his spiritual and physical forces.

CONCLUSION

Across the entire spectrum of study, we face the most complex variable of all—man himself. The study of leadership and decision making is a dynamic and challenging one. Yesterday's theories and hypotheses are continually being modified or questioned. It is necessary to assemble what is known and put it to use. The various perspectives and insights must be organized into a conceptual framework that can serve as a guide for the student of leadership. In the past several years, there has been significant research in decision making. There are a growing number of studies, articles, and texts written on the subject. Appendix C contains a list of suggested readings to enhance your knowledge of the decision making process.

"New technologies, global competition, and environmental limits will place greater premium on mental flexibility and sound judgment. What is a good management approach today may not be tomorrow. In our information age, the race will not go to the strong, but the cognitively swift." 22

Technological advances, operating with revolutionary force in our whole civilization, have introduced into military forces, and the employment of military power, a variety and complexity with which no single mind, not even that of a military genius, can be expected to cope in arriving at a total estimate of the situation. Only by complicated staff processes can the data be sifted and the issues compacted onto manageable form. An intricate organization of staffs and teams has therefore become necessary to the management of big wars, as of big business and big government. But how can the commander be sure that he has within his grasp all the elements of information that, if he were in direct touch with them, might vitally affect his judgment? His problem is to keep alive his intuitive insight, which leaders in the past could nourish on a first-hand knowledge and experience of events.

The study of leadership and behavioral decision theory is a legitimate and profitable exercise, though it can never be totally conclusive. The student can sometimes sketch a leader's persistent and dominate traits. Unfortunately, he can rarely say, and never be sure, how these operated in producing a decision. He is bound to use what is said or written after the event, and never what was actually in the leader's mind during the decision process.

There probably will never be a single model that can accurately portray the complexity of human decision making. This complexity is directly related to the incredible design and functioning of the human mind. One must be humble in presenting a model of decision making and acknowledge there is a continuum between analytical and recognitional decision making.

Case studies in analytical and recognitional decision making have been attached as Appendices D and E. These case studies were selected to challenge the student of decision making and to supplement the text material, providing a broader perspective of decision making.

The quest for the intangibles of making decisions will continue to be fascinating, if only because of our insistent conviction that the qualities of an individual that affect his decision can never be reduced to a formula and that these qualities have a determining effect on the fate of human lives.

RECOMMENDATIONS

"Whoever can make and implement his decisions consistently faster gains a tremendous, often decisive advantage. Decision making thus becomes a time-competitive process, and timeliness of decisions becomes essential to generating tempo."²³

Historically, the instruction in decision making at the service schools has focused on the analytical process. The analytical decision making process is practiced throughout our military careers when we plan and conduct exercises and operations from the most simple platoon "battle drills" to complex campaign planning. There is, however, little or no instruction or practical application of alternative decision making techniques such as *recognitional*, intuitive, or the "hybrid" techniques discussed herein. Military leaders rely on their military experience and make more and more decisions based upon that experience through recognition and intuition.

As a beginning, I recommend the military undertake two initiatives to prepare its officers to become better recognitional decision makers.

- Recognitional decision making and the hybrid methods such as those presented in this paper should receive the same emphasis that analytical decision making receives in all levels of professional military education. Early in their career, officers need to be introduced to recognitional and intuitive decision making. Officers need to understand concepts such as dialectics, analysis and synthesis, induction/deduction, abstracting and generalization, and heuristic methods. This awareness will help officers to begin to apply and hone their abilities in these areas.
- Formal professional military instruction in recognitional decision making must
 begin earlier in an officer's career, when 8 to 12 years of experience really begins

to influence the decisions that they make. Clausewitz, SunTsu and other military theorist all point out that knowledge is best developed by experience. This is because personal experiences are generally vividly ingrained in our memories and most easily recalled. In addition, Officers must optimize their learning from readings and exercises to help overcome the experience deficit. Research and case studies such this paper and its appendices can provide insight that has yet to be experienced by young officers. However, personal experience for each individual is different and we must apply alternative approaches to create a satisfactory experience level. As Field Marshall Slim wrote in his book <u>Defeat</u> into Victory, "Preparation for war is an expensive, burdensome business, yet there is one important part of it that costs little—study."

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¹ Carl von Clausewitz, <u>On War</u>, ed. and trans. Michael Howard and Peter Paret (Princeton:Princeton University Press, 1984), p.102

² Ibid., p.514.

³ W.F. Coventry and Irving Burstiner, <u>Management: A Basic Handbook</u> (Englewood Cliffs, N.J.: Prentice-Hall, 1977),p.1.

⁴ John Dewey, How We Think. (New York: D.C. Heath & Co., 1910), chap. 8.

⁵ Martin Van Creveld, <u>Command in War.</u> (Cambridge, MA: Harvard University Press, 1985), p. 191.

⁶ John Boyd, "Patterns of Conflict" and "An Organic Design for Command and Control," <u>A</u> <u>Discourse on Winning and Losing</u>. (Boulder, CO: Westview Press, 1985), pp. 4-6.

⁷ Alexander H. Cornell. The Decision Maker's Handbook, (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980), p.17.

⁸ J. Edward Russo and Paul J.H. Schoemaker, <u>Decision Traps</u>, <u>The Ten Barriers to Brilliant Decision-Making and How to Overcome Them</u>. (New York, NY: Dell Publishing Group, Inc., 1990) p. 1.

⁹ Ibid., p.2.

¹⁰ Ibid., p.2-3.

¹¹ Ibid., p.2.

¹² The authors' interpretation of "Image Theory," Marine Corps Doctrinal Publication 6. Command and Control, p. 72-75.

¹³ MCDP 6, Command and Control, p. 74-75

¹⁴ J. Edward Russo and Paul J.H. Schoemaker, p.3.

¹⁵ Ibid., p.3.

¹⁶ Ibid., p.119.

¹⁷ Ibid., p.4.

¹⁸ Sun Tsu, <u>The Art of War</u>, trans. Samuel B. Griffith (London: Oxford University Press, 1963), p.129

¹⁹ Napoleon, <u>Military Maxims of Napoleon</u>. ed. Thomas R. Phillips and published in <u>Roots of Strategy</u> (Harrisburg, PA: Stackpole Books, 1985), p.431

²⁰ Robert Glasner, The Nature of Expertise, Occasional Paper No. 107 (Columbus, OH: The national Center for Research in Vocational Education, 1985), p.8.

²¹ Ibid., p.8.

²² J. Edward Russo and Paul J.H. Schoemaker, p.226.

²³ Department of the Navy, Fleet Marine Force Manual 1. Warfighting, (Washington, D.C.: U.S. Government Printing Office, 1989), p. 69.

²⁴ William Slim, <u>Defeat Into Victory</u>. (London: Papermac, 1987), p.535.

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Appendix A

DECISION MAKING DEFINED

What is a *decision*? A somewhat simple definition would be that it is a settlement, a fixed intention, used to bring a conclusive result. It could also be called a resolution or a judgment to bring on a conclusive result. Webster's dictionary, among its several meanings, contains two that, when put together, are applicable to this paper. To paraphrase and combine them, a decision is the act of deciding or settling a dispute or question by giving a judgment or conclusion reached or given. The key phrases are "the act" and "a judgment" or "a conclusion" which settle a question. A decision is therefore not simply an act, but an act requiring judgment. A judgment requires a choice to become a decision. For if there is no choice, the decision has already been made. It is where alternatives exist that the act of decision making becomes meaningful.

In recent years a growing body of research and literature has been concerned with the process called *decision making*. A decision making process is defined as the act of examining a set of alternatives and applying some form of logic or reasoning in selecting one alternative from the set of all possible courses of action. A key element of the decision making process is a physical or psychological factor that influences the manner in which the decision maker evaluates the alternatives and arrives at a solution.

Appendix B

Decision Traps¹

The decision research of the last two decades has shown that people in numerous fields tend to make the same kinds of decision making mistakes. So whatever kind of decision you have to make, you can probably use the insights a small group of researchers have developed to prevent those mistakes.

We have highlighted the most common errors in the following ten "decision traps." You'll find that there errors plague different parts of your decision making process. Our goal is to show you how to shape your decision approach so as to avoid each of them. If you do that, we'll guarantee a good decision making process. And guaranteeing a good decision making process is as close as anyone can come to assuming good decision outcomes.

Here is a summary of the ten most dangerous decision traps:

- 1. Plunging In--Beginning to gather information and reach conclusions without first taking a few minutes to think about the crux of the issue you're facing or to think through how you believe decisions like this should be made.
- 2. Frame Blindness--Setting out to solve the wrong problem because you have created a mental framework for your decision with little thought, that causes you to overlook the best options or lose sight of important objectives.
- 3. Lack of Frame Control--Failing to consciously define the problem in more ways than once or being unduly influenced by the frames of others.
- 4. Overconfidence in Your Judgment--Failing to collect key f actual information because you are too sure of your assumptions and opinions.
- 5. Shortsighted Shortcuts--Relying inappropriately on "rules of thumb" such as implicitly trusting the most readily available information or anchoring too much on convenient facts.
- 6. Shooting From the Hip--Believing you can keep straight in your head all the information you've discovered, and therefore "winging it" rather than following a systematic procedure when making the final choice.
- 7. Group Failure--Assuming that with many smart people involved, good choices will follow automatically, and therefore failing to manage the group decision making process.
- 8. Fooling Yourself About Feedback--Failing to interpret the evidence from past outcomes for what it really says, either because you are protecting your ego or because you are tricked by hindsight.
- 9. Not Keeping Track--Assuming that experience will make its lessons available automatically, and therefore failing to keep systematic records to track the results of your decisions and failing to analyze these results in ways that reveal their key lessons.

10. Failure to Audit Your Decision Process--Failing to create an organized approach to understanding your own decision making, so you remain constantly exposed to all the above mistakes.

In simple decisions--say, whether to return a phone call--you probably do not need to worry about these decision traps. But in big decisions--the decisions that determine the success of your life and that of those around you--the decision traps frequently cause havoc.

A well-trained decision maker will sometimes make a mistake, just as a great athlete can lose a big game. But if you teach yourself an excellent decision-making process and practice it, you can succeed with consistency.

¹ J. Edward Russo and Paul J.H. Schoemaker, <u>Decision Traps</u>, <u>The Ten Barriers to Brilliant Decision-Making and How to Overcome Them</u>. (New York, NY: Dell Publishing Group, Inc., 1990) pp.xvi-xviii

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Appendix D

RESOURCE ALLOCATION CASE STUDY: STRATEGIC SEALIFT

by

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with assistance from

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Acronym Guide Strategic Sealift Case

ACAT Acquisition Category
APF Afloat Prepositioned Force
ARB Acquisition Review Board
CLF Combat Logistics Force

CMMS Congressionally Mandated Mobility Study

CNO Chief of Naval Operations

DAB Defense Acquisition Board

DCNO Deputy Chief of Naval Operation

DPSB Department of the Navy Program Strategy Board

DRB Defense Resources Board

ESC Navy Staff Executive Steering Committee

FYDP Future Years Defense Plan
IBR Investment Balance Review
ILS Integrated Logistics Support
IPL Integrated Priority List

JMA/SA Joint Mission Area/Support Area
JROC Joint Requirements Oversight Council
JWCA Joint Warfighting Capabilities Assessment
LMSR Large Medium-Speed Roll-on/Roll-off Ship

MARAD Maritime Administration

MNS Mission Need Statement

MPF Maritime Prepositioning Force

MRS Mobility Requirements Study

MRS BURU Mobility Rqmts. Study, Bottom Up Review Update

MSC Military Sealift Command
NAVSEA Naval Sea Systems Command
NDRF National Defense Reserve Fleet
NDSF National Defense Sealift Fund

OPNAV Office of the Chief of Naval Operations
ORD Operational Requirements Document

PBD Program Budget Decision
PDM Program Decision Memory

PDM Program Decision Memorandum
POM Program Objectives Memorandum
PPBS Program Planning and Budgeting System

PPG Preliminary Program Guidance

PRCC Program Review and Coordinating Committee

RAD Resource Allocation Display

RRF Ready Reserve Force

R³B Resource Requirements Review Board SCN Shipbuilding and Conversion, Navy

SPP Sponsor Program Proposal

RESOURCE ALLOCATION PROCESS CASE STUDY: STRATEGIC SEALIFT

After completing two professionally satisfying years as the Commanding Officer of USS Cimmaron (AO 177), CDR Julia Roos, USN, was not happy to be leaving command, but she felt fortunate in her new assignment to the staff of the Chief of Naval Operations in the Strategic Sealift Division (N42). In this assignment she felt that she would be using her Combat Logistics Force (CLF) experience coupled with experience derived from her tour on the staff of USTRANSCOM where she served following graduation from the College of Naval Command and Staff at the Naval War College. Although sealift had traditionally been perceived, in the opinion of many, as a secondary interest in Navy planning, its importance had been recognized beginning in the 1980s and it was now regarded as a high priority program by the Navy, Joint Chiefs of Staff (JCS), the Office of the Secretary of Defense (OSD), and the Congress. As she approached the Pentagon for the first day in her new job, CDR Roos looked forward to getting into the thick of a key Navy program effort.

After completing the initial check-in process, CDR Roos was introduced to the incumbent in her new job, CDR Paul Jenkins. Over a cup of coffee, CDR Jenkins began explaining the job, as he perceived it.

Sealift in Historical Perspective, or Life on the Back Burner

"Despite its widely acknowledged importance, sealift has not, until very recently, enjoyed a very high priority among Navy planners and decision makers when allocating funds," Jenkins began. "Higher priority had always been given to more glamorous combatant and weapons programs. Interest in sealift, however, began to increase in the late 1970s, during the Carter Administration. A Center for Naval Analyses (CNA) concept for shipboard prepositioning of military combat equipment and supplies was adopted by the administration and that became the basis of the Maritime Prepositioning Force (MPF) Program. Later, in the 1980s, when DoD budget levels were increasing substantially, sealift programs began receiving still more attention and resources. A total of over \$7 billion was invested in sealift and sealift related programs during the 1980s. That money procured 13 MPF Program ships that are now deployed, loaded with U.S. Marine Corps equipment, at Diego Garcia, Guam, and the Mediterranean. It also procured eight high-speed SL-7 container ships for the Fast Sealift Ship (FSS) Program, two new Hospital Ships (T-AH), two Aviation Support Ships (T-AVB), numerous ships for the Ready Reserve Force (RRF), five T-5 tankers, and various loading/offloading systems and other support items to increase the effectiveness of the sealift fleet.

"Despite the significant improvements brought about by the sealift enhancement programs of the 1980s there remained a feeling in some committees of Congress and elsewhere that our lift capabilities were still inadequate. Much of this discomfort may have been due to the steady erosion of the U.S. flag commercial fleet during the decade of the 80s. Burdened with higher capital and operating costs than most foreign ship operators, and faced with the elimination by the

Reagan Administration of operating subsidy programs dating from the 1930s, the U.S. flag merchant fleet declined steadily in the 1980s.

"Another important aspect of force mobility, of course, is airlift. Although not usually high on the Air Force's priority list," said Jenkins with a shrug, "airlift is at least not quite the stepchild to the Air Force that sealist was to Navy planners. In 1980 the Air Force went to Congress to request initial funding for the new airlift aircraft that would become the C-17. Faced with proposals for expensive new programs for prepositioning of military equipment, both land and sea based, for additional sealift assets, and now for a major new aircraft development program, Congress, understandably, felt the need for more information. As a result of their concern, Congress directed the Department of Defense to undertake a study of the lift requirements for responding to possible military contingencies. This study, which came to be known as the Congressionally Mandated Mobility Study (CMMS), was completed in 1981 and, although it addressed sealift and prepositioning as well as airlift, it became known mainly for its airlift recommendations. Based, in part, upon justification derived from the CMMS, the C-17 was funded and proceeded into its very expensive development program. The Maritime Prepositioning Program and strategic sealist enhancement programs also proceeded in the 1980s, buoyed, in part, by justification derived from the CMMS, and, in part, by the availability of new funds in the first Reagan administration."

Sealift in the Persian Gulf War

"Positive results were realized in Operations Desert Shield and Desert Storm from the increased emphasis on strategic sealift in the 1980s, especially from the prepositioned equipment and the Fast Sealift Ship (FSS) activation. All nine Maritime Prepositioning Ships (MPS) based in Diego Garcia and Guam had delivered their loads by the first week in September 1990. Similar success was achieved by the Afloat Prepositioned Force (APF) ships. These were ships chartered by the Military Sealift Command (MSC), based in Diego Garcia, and loaded (but not combat loaded) with Air Force and Army equipment, supplies, and ammunition as well as a containerized hospital. All eight FSS owned by MSC were activated, loaded, and rapidly deployed. (There was, however, a setback when one FSS suffered a series of propulsion casualties during her initial transatlantic transit resulting in a delayed delivery of part of the first wave of ships.) In the end, the FSS delivered 13 percent of unit cargo although they comprised only 4 percent of the total number of sealift ships. Additionally, 16 of the first 17 Ready Reserve Force (RRF) ships activated by MSC completed their initial transit, well above the initial expectations of some for RRF performance."

"Despite these initial successes in Desert Shield/Storm," Jenkins said, "there was still reason for concern regarding the adequacy of our strategic sealift. The list of weaknesses observed in U.S. sealift capabilities during the Persian Gulf was long. The ability of the RRF to meet the deployment needs of U.S. forces in all situations must be regarded as mixed. Only 71 of 96 RRF ships available were actually used, with many experiencing extensive delays as a result of material problems. In fact, only 18 of the 71 ships activated were actually ready on time. Many of the

ships activated, principally traditional breakbulk ships, proved incompatible with the equipment they were assigned to transport. The most immediately useful proved to be the Roll-On/Roll-Off (RO/RO) ships of which only 17 were available in the RRF. RRF ships not activated were primarily older breakbulk ships or tankers. (The need for tankers was reduced due to the ready availability of petroleum products in the Gulf region, and MSC could charter foreign breakbulk ships faster than they could activate the remaining RRF ships.) Of great concern during the RRF activations was the shortage of qualified and experienced American merchant mariners to man the ships. Due to the limitations of its own assets and the limitations of the private sector U.S. flag merchant fleet, MSC chartered 187 foreign flag cargo ships from 27 different countries during the conflict. The National Defense Reserve Fleet (NDRF), an older fleet maintained at lesser state of readiness than the RRF, had no ships activated during the Gulf War."

"There were other hazards," Jenkins reflected, "in drawing satisfaction from the lift performance of the Persian Gulf War. There were unique aspects of that situation," he said, "that one should not rely upon for the next contingency. These included 1) the modern Saudi Arabian port facilities--Al-Jubayl and Ad-Dammam--capable of accommodating large ships like the FSS and providing for the efficient discharge of cargo; 2) unopposed passage into the theater of operations and strong international support for U.S. efforts, making charters attractive to foreign flag carriers; and 3) an extended period of time, nearly seven months, to build up forces before actual conflict. It is highly unlikely, in my opinion," Jenkins said, "that such favorable conditions will exist in the next major regional conflict in which we become involved, and we certainly should not base our planning on the expectation that they will."

Congressional Sealift Initiatives and the MRS

"It may surprise you to learn," Paul Jenkins continued, "that the initiative for our mobility programs, especially for our sealift programs, has come from a most unlikely source, the Congress. Remember that the study done in 1981, that served as a motivator for the sealift programs of the 80s, was a Congressionally Mandated Mobility Study. Again, at the end of the 80s, it was Congress that provided the stimulus for more attention to strategic lift. The Congressional interest in this most recent round of activity was initially manifested in a most emphatic and concrete form when \$600 million was appropriated for a sealift construction program in the Fiscal Year 1990 budget. The Department of Defense had not requested that money and when it appeared, they were unable (or unwilling, some claim) to use it for the purpose Congress intended. As result, \$225 million was reprogrammed leaving \$375 million earmarked for sealift."

"Wait a minute!," Julia Roos exclaimed. "You mean that Congress, on its own initiative, appropriated that much money for something not even requested by DoD! Doesn't that stand the system on its head! I remember studying the Resource Allocation Process at the War College and it was an orderly process that ended with Congress, it didn't begin with them. Requirements were generated by the Joint Staff in the JSPS, programs to meet those requirements and their associated budgets were developed by the services in the PPBS, and those programs that survived

the various reviews went to Congress in the President's budget. It has been my perception that Congress then usually sent less money than was requested and their role was at the end of the process. Doesn't it work that way anymore?"

"You are absolutely right," Paul said with a chuckle, "that is the way it is supposed to work, and it is indeed the way it works most of the time. Every year, however, Congress not only reduces or eliminates some items from the budget, but they also increase the funding for a few things and add a few more items not requested by the administration. Usually the items added are relatively small as a percentage of the total budget but there are almost always some additions. The \$600 million for sealift was a pretty substantial plus-up but even that was only a fraction of 1% of the total DoD budget for FY 1990. It is, after all, the prerogative and the responsibility of the members of Congress, who are elected by the people, to make the final determination of how the citizens' money is to be spent. In the Navy, however, we tend to bitterly resent any initiative forced upon us by Congress, and we resist executing their pet programs. I think it is an unfortunate thing," Jenkins reflected, "because all we do by dragging our feet on the congressional initiatives, that usually represent a very small fraction of the budget, is sour our relations with Congress on the vast bulk of the budget. In the case of sealift Congress was, in my opinion, absolutely right."

"The fact that they were right was forcefully demonstrated during the same year of that first unsolicited appropriation," Paul continued, "when Iraq invaded Kuwait and Operation Desert Shield began. That clearly demonstrated the importance of sealift and, thus justified, Congress appropriated an additional \$900 million for sealift in the Fiscal Year 1991 budget."

"In the DoD authorization bill for that fiscal year there was yet another Congressional initiative that turned out to be very important. The FY 1991 authorization bill called for a new mobility study to determine lift requirements. That study, which came to be known as the Mobility Requirements Study, or MRS, was done by the Joint Staff. The basic results of the MRS were published in January 1992 and most people think the Joint Staff did an excellent job."

"Here again," Julia Roos interrupted, "things seem to be happening outside of the normal processes. Doesn't the Joint Staff worry about such things as mobility in the course of the JSPS? Why did they do a special study? Why didn't they just give Congress the mobility requirements from the latest round of the JSPS?"

"That is a good question," Paul Jenkins replied, "and the answer is to be found in the nature of the various parts of the planning process. The JSPS considers the full range of U.S. security interests and normally takes a rather broad view of strategic issues. It certainly recognizes the importance of mobility and the need for adequate mobility assets, but a detailed assessment of those needs would be the subject of another kind of study. The MRS was that kind of highly focused and detailed study effort." Pulling a copy of the MRS report from his file drawer, Paul began looking through it. "Listen to this, Julia," he said, and began to read:

"The MRS has been a massive effort involving many offices and staffs in the Department of Defense responsible for transportation. The study analyzed, compared, and revised many different conflict scenarios and mobility plans. The recent experiences of Operations DESERT SHIELD and DESERT STORM give both urgency and understanding to the analysis."

"So you see," Paul said, "the MRS was highly focused and specific. Despite the effort that goes into the normal JSPS, it is not possible to develop that kind of detail in all of the broad range of issues it covers."

"I see," said Julia, "but does it always take a congressional mandate to stimulate detailed studies of our basic military needs?"

"No," said Paul with a smile, "but sometimes it helps, especially on issues like lift requirements. DoD is actually very good about defining and justifying its requirements, in my opinion, but we seem to be a bit more diligent about it for major weapons acquisition programs than for support issues such as mobility."

"You should be aware," Paul continued, "that during the time the MRS was going on, the regular acquisition system was being cranked up for strategic sealift. In February of 1991 the Secretary of the Navy directed the development of a sealist operational requirement, and in that same month a draft Tentative Operational Requirement (TOR) was provided to the Naval Sea Systems Command (NAVSEA). By April of 1991 NAVSEA had developed initial feasibility point designs in response to the draft TOR. In July a draft Strategic Sealift Implementation Plan (SSIP) was presented to the Secretary of the Navy and the Secretary of Defense, and in that same month a Mission Need Statement (MNS) for a sealist program was validated by the Joint Requirements Oversight Council (JROC). In August of 1991 the Strategic Sealift Program approached the first milestone in the acquisition process, Milestone 0. In that month the Defense Acquisition Board (DAB) authorized the Strategic Sealist Program to proceed to the Concept Design Phase (Phase 0) as an Acquisition Category ID (ACAT ID) program (OSD oversight). Also in August, NAVSEA released a Request for Proposals (RFP) and Circular of Requirements (COR) to industry for sealift ship design concepts. In the very next month, September 1991, concept design contracts were awarded to nine shipyards; and concept designs resulting from those contracts were delivered to NAVSEA for review in December of 1991. In the meantime Congress was appropriating \$600 million more for sealift in the Fiscal Year 1992 Budget."

"Wow! It certainly doesn't sound like the Navy was dragging its feet on the program to me," said Julia.

"That's right," replied Paul. "It may be fair to argue that the Navy should have given more emphasis to sealift in the past and/or should have started a sealift program earlier, but we, in N42, think that the assertion that we are dragging our feet now that the program has started is a bad rap."

"This takes us up to January of 1992 when the MRS Final Report, Volume I, was published. That has become recognized as the official definition of the current sealift requirement."

"Okay," said Julia, "what were the findings of this MRS?"

"Here," said Paul handing her the MRS report, "see for yourself. You may want to read the whole report at some time but the key findings are summarized in the section called Integrated Mobility Plan in the Executive Summary part of the report. You can read it while I get us a refill of coffee."

Integrated Mobility Plan

To meet the total mobility requirement, the Department of Defense has developed a notional plan for execution through the normal programming, budget, and acquisition procedures. The major components of the plan are:

• To acquire--through new construction and conversion--additional sealift capacity equal to 20 large (380,000 square feet total capacity and 300,000 square feet capacity for prepositioning configuration), medium-speed (24-knot sustained) roll-on/roll-off ships (LMSRs). In addition, to leave two container ships (2000 container capacity each) for prepositioning. The exact size and number of ships needed will be determined during the acquisition process. The approximate delivery schedule for these ships is as follows.

	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	Total
Pre-positioning		4		4	1			9
Fast sealift				2	5	4		11
Container		2						2

- To deploy (by FY 1997) an afloat pre-positioned package of approximately 2 million sqft of Army combat and combat support equipment. This package will be carried on nine LMSRs in the pre-positioning configuration. In the near term, chartered pre-positioning ships will be used to supplement converted and newly constructed ships. This additional force, added to the quick-reaction forces already in the DOD program, will provide an adequate capability to respond in force within the first few weeks to any regional crisis that threatens US interests.
- To add (by FY 1998) 3 million sqft of surge sealift capability for the rapid deployment of heavy Army divisions and support from the United States. This capability will be provided by 11 of the LMSRs in high readiness. When added to the eight fast sealift ships

currently maintained by the Military Sealift Command, this will provide adequate capability to deploy rapidly from the United States into a regional crisis.

- To expand (by FY 1999) the Ready Reserve Force (RRF) from the current 96 ships to 140 ships (of which 102 will be dry-cargo ships) and to increase the readiness of the fleet. The expansion and continuing modernization of the RRF will be through acquisition of used ships, or alternatively, charter, build-and-charter, and national defense features in new commercial ships or combination thereof. This fleet will be adequate to deploy, within 8 weeks, the decisive force required for the United States to prevail in a major regional contingency.
 - To consider through the acquisition process new concepts that might provide the required sealift capacity at lower cost.
 - To continue the C-17 program to improve the airlift component of strategic mobility.
- To improve specific components of the transportation system within the United States
 to move combat and support units from their peacetime locations to airports and
 seaports of embarkation by accomplishing the following:
 - -- Buy and stage about 233 additional heavy-lift railcars, increase the daily railcar loading capacity of key installation, and improve military use of containerization.
 - -- Develop a containerized west coast ammunition loading facility.
 - -- Negotiate additional berthing at loading ports for deploying units.
 - -- Improve the readiness and availability of Transportation Terminal Units.
 - -- Seek new legislation to ensure continuous and expeditious use of ports.

"This is a pretty straight forward and concise statement of requirements," Julia remarked to Paul as he returned. "So what we have here," she continued, "is a statement of military requirements developed by the Joint Staff, the people who are supposed to develop requirements, but done sort of outside the strict limits of the JSPS process."

"That's right," responded Paul. "JSPS recognized the requirement for sealift, and, stimulated by congressional interest, the Joint Staff then developed a more specific and detailed definition of those requirements. It was a little different from the normal process, but it worked rather well, I think. The congressional stimulus was an important factor here, though. Let me read you some excerpts from a roasting administered by Congressman Murtha, Chairman of the House Appropriations Defense Subcommittee, to Gerald Cann, then Assistant Secretary of the Navy for Research, Development, and Acquisition, when he was testifying before the Subcommittee in the spring of 1991."

Opening a grey paperbound Congressional Committee Report, Paul began to read:

"Mr. Murtha. 'Several years ago we started putting money in for sealift. We bought SL-7s against the Navy's better judgment. Is there any question that without the SL-7s it would have been impossible to deploy our troops so quickly to the Persian Gulf? A pretty high percentage went by sea.'

Mr. Cann. 'Practically all went by sea.'

Mr. Murtha. 'Ninety-five percent.'

Mr. Cann. 'Yes, sir.'

Mr. Murtha. 'You are going to study the sealist issue until next year and probably try to rescind the money next year?'

Mr. Cann. 'No, sir.'

Mr. Murtha. 'All I hear about is studies from the Navy. Usually we put the money in, we make it clear, Congress decides it, and it is a decision between the Executive Branch and Congress, and all you do is another study on sealift."

"It sure sounds like Congress wants to get on with the program," Julia exclaimed. "Is there any basis for his complaints?"

"The funds were impounded by DoD until a requirement was defined and approved and a program to fill that requirement developed," said Paul. "Poor Gerry Cann was taking the heat for something not yet within his power. Listen to more of this dialogue:

Mr. Murtha '. . . It reminds me of some of these other agencies in Washington where we can't get anything done. You want to talk about the industrial base; we are getting down to the point where we are not going to be able to build any ships in this country because you are not buying any ships and yet you are continuing to study it. It seems to me at some point you have to give us some credit over here for knowing a little bit about national defense. And the Navy should get on with this program.'

Mr. Cann. 'I would be delighted to get on with it. As soon as we have authority to proceed and have the funds released to the Navy and have the results of the JCS sealift study, we intend to get on with RFPs to build ships."

"Wow," said Julia, "that's the kind of congressional support I want to see for my program!"

"Now," said Paul, "let me take you around the building and introduce you to some of the people with whom you will be interacting in this program. Since we have been talking about the MRS and the Joint Staff, I will first take you to meet CDR Michala Smith in the Mobility Division of J-4. She has just graduated from the Naval War College and recently reported to the Joint Staff. She will be your main point of contact on the Joint Staff for matters relating to the sealift program."

As they were walking along the seemingly endless corridors of the Pentagon toward the Joint Staff offices Julia asked, "What is the current status of the program? I hope we are at last buying the ships, as Congressman Murtha demanded. Where do we stand?"

"Yes, we are," responded Paul. "As a matter of fact, CDR Smith at J-4 maintains a data base summarizing the current status of all of the various categories of sealift assets and I will ask her to brief you on it when we meet with her shortly."

CDR Michala Smith greeted her guests as they were signing in at the guard desk that attended the special security arrangements of the Joint Staff office area. Passing through a warren of office spaces, they arrived at a small conference room. "Call me Kala," said CDR Smith, as Paul Jenkins introduced her to Julia Roos. "Welcome to the Pentagon."

At Paul's request, Kala Smith gave them a briefing on the status of the Strategic Sealist Program which included a summary of current assets, the status of ships under construction, and descriptions of the major functional groups within Strategic Sealist such as the Marine's Maritime Prepositioning Force (MPF), the Army Afloat Pre-positioning (PREPO) Program, the Fast Sealist Ships (FSS), and various other categories of lift assets that could be employed if needed.

"Part of my job here in J-4 is to monitor the status of the Strategic Sealist Program and to keep my seniors and colleagues informed about issues that may affect it, particularly those issues that might involve the JCS. I am sure you have plenty of very detailed information in your files at N42, but this sealist summary may be helpful to you," Kala said, handing Julia several sheets of paper containing sealist summary tables.

"Thanks, Kala," said Julia. "Your summary revealed some aspects of the spectrum of sealist assets I had not considered before such as the Effective US Control Ships, US-Owned Flag of Convenience Ships, and Allied Shipping."

"I hope it was helpful," said Kala. "If there is anything else I can do to help you, please let me know. I look forward to working with you on this program."

After leaving the JCS office area, Paul Jenkins suggested that they go to the Pentagon Officers' Athletic Club (POAC) for lunch before their next visit. During lunch Paul continued his account of the acquisition process to date for the strategic sealift ships. "As I said earlier," he began, "the acquisition process in the Navy began in February 1991, well before the MRS result was published in January 1992. In March 1992 the NAVSEA Acquisition Review Board (ARB) reviewed the Strategic Sealist Program and in April, one month later, the Navy's Warfare Requirements Board (WRB) recommended that the CNO approve the Sealist Program Operational Requirements Document (ORD) and a revised MNS. The CNO did that in June 1992 when he approved the MNS and two ORDs, one ORD for new construction Large Medium-Speed Roll-On/Roll-Off (LMSR) ships and another ORD for "commercially-viable" ships to be used for enhancing the Ready Reserve Fleet (RRF). In that same month of June," Jenkins continued, "the JROC met and validated the revised MNS for sealift and endorsed the key parameters for the new construction LMSRs. The JROC did not, however, validate the parameters for the "commercially-viable" ships, but encouraged the Navy to further study the issue. The Navy complied with that direction two months later (August 1992) by initiating a study, in collaboration with the Maritime Administration (MARAD), to investigate commerciallyviable but militarily useful ships."

"Boy! There really are a lot of documents, reports, briefings, reviews, studies and other wickets to get through in getting a program off the ground," exclaimed Julia. "Is all of this necessary?"

"Probably not," replied Paul with a shrug, "but all of these requirements are part of the business and we have no choice but to jump through each of the hoops. All of this has built up over the years in response to problems that happened in the past. There is a lot of money at stake in a major program like this so we get a lot of supervision in spending it. There are still plenty of wickets to pass through."

"In August of 1992," Paul continued, "the Assistant Secretary of the Navy (Research, Development, and Acquisition) authorized the Strategic Sealift Program to proceed to the Milestone I Defense Acquisition Board (DAB) decision meeting. As part of that process the OSD Conventional Systems Committee (CSC) met in September to review the readiness of the program to proceed to the Milestone I DAB. At about the same time, however, the Undersecretary of Defense (Acquisition) recommended that the Strategic Sealift Program be redesignated as ACAT IC, which meant it would have Navy oversight as opposed to OSD oversight. The Milestone I DAB was then canceled and authorization was given for the release of RFPs for further development. RFPs for the engineering design (ED) of new construction ships, ship conversions, and cargo handling equipment were then released to industry. ED contracts were awarded to 5 shipyards for ship conversions in October 1992, to 7 shipyards for new construction ships in November 1992, and for cargo handling equipment to one firm in March 1993. After receiving price proposals from all of the ED contractors for conversion contracts, a Milestone II Navy

Program Decision Meeting (NPDM) conducted in June 1993 authorized proceeding to acquisition, and contracts were awarded to the NASSCO and Newport News Shipyards for ship conversions in July 1993. Similarly, a Milestone II NPDM for the new construction ships was held in July and lead ship construction contracts were awarded to NASSCO and Avondale Shipyards in September 1993."

"Despite Congressman Murtha's impatience it sounds like the program is proceeding," said Julia, "and that you went through all of the acquisition wickets as quickly as could be reasonably expected. All of those briefings and meetings and documents must require a lot of work."

"You bet they do," replied Jenkins, "and that is something you will soon know about first hand. We think we have gotten things done as quickly as the system allows."

"There is one more thing we have not yet talked about that you should be familiar with," Paul continued, "and that is the National Defense Sealift Fund or NDSF. The funds appropriated by Congress for building Navy ships are in an appropriation called SCN, which stands for Shipbuilding and Conversion, Navy. The funding provided by Congress for sealist was initially contained in the SCN appropriation. That included the \$600 million in FY 90, the \$900 million in FY 91, and the \$600 million appropriated in FY 92. There was concern in some quarters, and I certainly shared that concern, that having all of that money in the SCN account would present a serious danger of having it reprogrammed to cover cost growth in warship programs rather than using it for sealift. Starting in the summer of 1991 we began working to draft legislation that would set up a separate appropriation account for the sealift funds. That account was called the National Defense Sealist Fund or NDSF and the proposed legislation was sent to Congress by the Secretary of Defense in April of 1992 as the "National Defense Sealist Improvement Act." Legislation establishing the NDSF was passed by Congress as part of the FY93 Defense Authorization Act and signed by the President in October 1992. Acting Secretary of the Navy Sean O'Keefe is widely given credit for pushing that through in the final year of the Bush Administration. The NDSF was initially capitalized with \$1850 million transferred from the SCN account and an additional \$613 million was appropriated in the Fiscal Year 1993 Budget."

"I can see how important that could be," said Julia. "It must be pretty unusual for a program to have its own separate appropriation. Were additional funds added in the FY 94 and FY 95 Budgets?"

"It is absolutely unique," Paul replied, "and yes, an additional \$290.8 million was appropriated for FY 94, \$724.4 million for FY 95, and \$735.0 million for FY96."

Programming and Budgeting for the Sealift Program

After lunch Paul led the way back to the OPNAV staff office areas. "Our next visit is to the OPNAV programming shop," he said, turning into the D Ring corridor. "That is the Program Planning and Development Branch or N801 in the new OPNAV organization structure. They play a key role, perhaps the key role, in developing the Navy POM. You will want to work closely with them in developing your program plans. Your key point of contact in N801 will be LCDR Dietrich Kuhlmann. I have asked Dietrich to give you a briefing on the Sealift Program as seen from the programming and budgeting point of view."

As they entered the N801 office area Jenkins encountered LCDR Dietrich Kuhlmann walking down the corridor. "I have been expecting you," said Kuhlmann as he led them toward a small conference table placed in the general office area. After introductions and the filling of coffee cups, he left briefly and returned with several file folders containing various documents including numerous charts and tables. Paul provided a brief summary of the kinds of information already given to Julia and invited Dietrich to continue from there.

"For the programming story," Dietrich began, "I think the best place to begin is with the JCS Mobility Requirements Study Report. That established the requirement baseline against which we develop and fund our program. That is shown here, Dietrich said pulling a table from one of his file folders. This table establishes a baseline for pre-MRS sealift, taking existing assets and adjusting for already programmed procurement and anticipated retirements to 1999. This baseline was considered insufficient to meet the mobility requirements for MRC-E and, thus, the MRS recommended increases in surge, prepo, the RRF, etc. which are not reflected in the table."

BASELINE SEALIFT ASSETS											
FLEET/TOTAL	FSS	RO/RO	BB	LASH/SB	T-ACS	CONT	ОТН	WITHHOLD			
RRF/104(81)		36(17)	49(49)	7(7)	10(8)	-					
MSC/19(16)	8(8)	4(4)	5(2)				2(2)				
USFLAG/71(134)		12(12)	0(11)	2(6)		38(77)	10(12)				
EUSC/14(29)		0(2)	8(15)	0(4)		6(8)	` /	9(8)			
FSS = Fast Sealift Ship RO/RO = Roll On/Roll Off Ship BB = Breakbulk, EUSC = Effective US Cntrl. LASH/SB = Lighterage Aboard Ship/Sea Barge				T-ACS = Auxiliary Crane Ship CONT = Container Ship OTH = Other Note: Numbers in parentheses indicate ships in 1991.							

"From the above baseline, the MRS recommended, among other things, a notional delivery schedule for the 20 LMSR ships the study found to be needed to provide the required lift capacity for Army equipment in both prepositioning and surge transportation," Dietrich continued.

"Yes," Julia said, "I remember that table in the report Executive Summary. Is that still the delivery schedule?"

"I want to emphasize the fact that the delivery schedule in the report was only a notional schedule," Dietrich said shaking his head. "In the course of developing an acquisition plan the MRS delivery schedule was found to be unaffordable and unrealistic due to contract award times, so the current delivery schedule is somewhat different. In addition we are now procuring only 19 ships, 5 conversions and 14 new construction, because ship design submissions indicated that 19 ships would provide the full capacity requirement of 5 million square feet, 2 million prepo and 3 million surge, identified in the MRS. There have been various changes in the details of the Strategic Sealift Program during the iterations of the planning, programming, and budgeting process since the program was established, but the basic goal of acquiring the sealift assets identified in the MRS has remained constant."

"How does this planning and programming process work?," asked Julia. "Who makes the decisions about who gets what, and how are those decisions made?"

"That is a rather long story," Dietrich Kuhlmann replied, "but let me try to outline the process to you. The Navy's Program Objectives Memorandum Process or POM Process normally proceeds in three phases: the Planning Phase that lasts from November through January, the Programming Phase from February through March, and the POM Approval Phase in April and May. In the Planning Phase the key activities are the Joint Mission Area and Support Area Assessments (JMA/SA) and the Investment Balance Review (IBR). The Joint Mission Areas include such things as Joint Strike Warfare and your area, Strategic Sealist under the Maritime Support of Land Forces Joint Mission Area. The Support Areas include such things as Manpower, Personnel, and Shore Training. There are currently seven mission and three support areas identified for POM planning. The purpose of the JMA/SA assessments is to merge operational requirements, evolving strategies, and fiscal realities into an integrated investment strategy. In addition to evaluating Navy programs, the JMA/SA assessments review contributions from, and to, other services' forces and missions. All of this is subjected to an Investment Balance Review or IBR conducted by the Assessment Division (N81) that seeks to combine the various assessment results into a complete Navy investment strategy. The overall direction of this process is the role of the Resources and Requirements Review Board (R³B). This is a senior board that sets direction, provides guidance, and approves or disapproves programmatic recommendations resulting from each JMA/SA assessment."

"The resource sponsor Programming Phase," Dietrich continued, "commences with the issuance by the Director of the Programming Division (N80) of the Preliminary Program Guidance (PPG) and ends with the presentation of the Sponsor Program Proposals (SPPs). The PPG documents R³B programmatic decisions made as a result of the JMA/SA assessments and the IBR, and considers inputs from Unified CINCs, Component Commanders, and claimants. N80 adjusts resource sponsor program guidance as required after the issuance of DoD Fiscal Guidance."

"Just a minute," interrupted Julia Roos, "what do you mean by resource sponsors and claimants? Who are they?"

"Okay, let me explain about that," Dietrich said patiently. "Resource sponsors are people like N86 for surface combatants, N87 for submarines, and N88 for aircraft. They are the officials responsible for planning and "sponsoring" some sector of the Navy's resources. The sponsor for strategic sealift, for example, is the DCNO (Logistics), N4. You in N42 are representatives of that resource sponsor. Claimants are the officials who actually spend the money. For strategic sealift, for example, claimants would be the Commander, Military Sealift Command for the operation and maintenance of the ships and the Commander, Naval Sea Systems Command for procurement of the new and conversion sealift ships."

"Thanks," said Julia, "that helps."

"Upon receipt of the Preliminary Program Guidance," Kuhlmann continued, "resource sponsors adjust their programs to meet the prescribed fiscal and programmatic direction. This is also the sponsor's opportunity to make any technical corrections, fact-of-life cost adjustments and other changes, within guidance, to reflect current needs. These adjustments are transmitted electronically to N80 as deltas to the current Resource Allocation Display or RAD. This electronic data, along with any written briefing and back-up material, will constitute the Sponsor Program Proposal or SPP. After transmission, resource sponsors will present their SPPs to the Program Review and Coordinating Committee (PRCC) and/or the R³B. There are some other aspects to the Programming Phase, but that is the heart of it."

"The final phase of POM development, the Approval Phase, begins after SPP presentations," Dietrich continued. "N80 consolidates all SPPs into a proposed Navy program within the DON fiscal guidance issued by OSD. This tentative POM is then briefed to the R³B, the Navy Staff Executive Steering Committee (ESC) and the CNO ESC. Following the CNO review, N80 and his Marine Corps counterpart, the Deputy Chief of Staff (Programs and Resources), will brief the Department of the Navy Program Strategy Board where the Secretary of the Navy reviews and approves the DON program."

"Many thanks for the briefing, Dietrich," interjected Paul Jenkins. Julia, it is getting late and we need to get back to our office. I want to introduce you to your new boss, Jon Kaskin, before the day is over."

Back in the N42 office area Paul introduced Julia to Jon Kaskin, the Director of N42, the Strategic Sealist Division of the Office of the DCNO (Logistics). After the introductions, Kaskin invited Paul and Julia into his office.

"There is an issue," Kaskin began, "to which I think we need to begin giving some thought, and that is a long range program that will satisfy our sealift needs beyond the period considered by the MRS and the current FYDP. We have been focused so long, and so hard, on getting this program going, but I think that it is now time to begin extending our horizon out beyond that window. Shipbuilding is a long term business and we need to consider how this program should be structured to maintain the currently specified requirement not only to 1999 but out into the indefinite future. I want to get together again with you tomorrow afternoon to discuss this further. I want to talk about what needs to be done to establish a long term program. What do we need to do? Who do we need to talk to? What should be our strategy? Please be ready to discuss those items and anything else you can think of that we need to consider tomorrow at 1400. I'll see you then."

As they were leaving Kaskin's office, Paul was called to the telephone. A few minutes later as he rejoined Julia, she could immediately see that something was wrong. "I have just received news that my parents were in an automobile accident earlier today," Paul said. "They are both out of danger now, but my mother will have surgery tomorrow. I am going on emergency leave. I'm out of here tonight. Put some ideas together based on what we talked about today and present them to Kaskin tomorrow, Julia. You're a War College graduate, it should be a piece of cake for you. I'll see you next week."

Put yourself in Julia Roos' shoes. Be prepared to discuss in class how you would respond in her situation. What strategy would you recommend to establish a long term program for maintaining the sealift fleet? What has to be done? What kind of information is needed? Who must be contacted? What roles would each of those persons/offices contacted play in your strategy? What are the near term objectives in your strategy and what are the long term goals? What are the key points to be raised with your new boss in your first meeting with him tomorrow?

Appendix E

RECOGNITIONAL DECISION MAKING CASE STUDY: DECISION IN THE GULF H. Norman Schwarzkopf

from

Brave Decisions

Moral Courage from the Revolutionary War to Desert Storm

by

Colonel Harry J. Maihafer

June 1995

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Decision in the Gulf

Part 1.

In the spring of 1991, at the conclusion of Operation Desert Storm, America had its first battlefield hero in decades. He was General H. Norman Schwarzkopf, Jr., whom reporters sometimes referred to as Stormin' Norman, which he didn't much care for. His men, on the other hand, knew him as the Bear, a name affectionately given to him in Vietnam, and which somehow seemed to fit. By any label, he was surely man of the hour, a burly, four-star, larger-than-life figure in desert camouflage who had arrived prominently on the international scene.

Saddam Hussein, threatening U.S. president George Bush, had promised "the mother of all battles": "Thousands of Americans you have pushed into this dark tunnel will go home shrouded in sad coffins." When it came to pass, however, the actual war had been made to appear almost too easy. Schwarzkopf had led an Allied force to one of the most complete, one-sided victories in history, a victory that might have been compared to Hannibal's at Cannae or Napoleon's at Jena. He had overwhelmed a numerically superior force, had wrought massive destruction, and had achieved it with but a minimum number of friendly casualties.

Looking back over the past six months, however, or for that matter reviewing his entire life, Schwarzkopf knew it had *not* been easy. Along the way, he had faced many tests and hurdles. Often the path had been strewn with rocks and the future clouded in uncertainty.

Shortly after his twelfth birthday, Norman Schwarzkopf left home to join his father, head of the U.S. military mission in Iran. Herbert Schwarzkopf, West Point class of 1917, had left the service in 1921 to head the New Jersey State Police and had gained national prominence in the early 1930s as chief investigator of the Lindbergh kidnapping case. He'd returned to active duty during World War II, had been promoted to general, and had spent much of the war overseas. By 1946, the elder Schwarzkopf decided not only that he missed his only son, but that living in a foreign country would be a great experience for the boy.

Young Norman idolized his dad; arriving in Iran, he was determined to emulate his father and to live up to his high standards. He'd later say: "Duty, Honor, Country, the West Point motto, was his creed, and it became mine." However, to follow the creed often took a bit of doing. For example, there was the time they visited the camp of a Baluchi chieftain.

After the preliminaries, dinner was served in a main tent whose floor was covered by thick, multicolored rugs with geometric patterns. Norman sat next to his father amid a circle of fierce-looking tribesmen. Soon servants brought in sheep which had been roasted whole on spits.

To the Baluchis, it seemed, a sheep's eyeball was a great delicacy Accordingly, an eye was plucked out and offered ceremoniously to General Schwarzkopf, who picked it up along with a handful of rice, put it in his mouth, and solemnly chewed.

To the boy's horror, the chieftain then announced they must also honor the general's son with an eyeball. "I'm not going to eat that," the youngster whispered to his dad.

"You will eat it!" was the reply, and somehow Norman managed to do so. Later, after explaining that refusal would have been considered an insult, his father said: "But instead you ate it, and by doing that you made a contribution to American-Iranian relations. I'm proud of you." It was a compliment he'd always cherish.

After attending various schools, many of them overseas, the general's son, H. Norman Junior, went on to West Point, from which he graduated in 1956. Then came a series of junior officer assignments with troop units in the States and in Germany, followed by still more schooling, both civil and military. In 1964 he received a master's degree in engineering from U.S.C., which led to a teaching assignment at the Military Academy.

Meanwhile, of course, Schwarzkopf was well aware of the brewing troubles in Southeast Asia. In 1961, for example, with the war going poorly for the South Vietnamese, he'd read of President John F. Kennedy directing a major expansion of the U.S. military advisory effort, and had watched with interest as the number of advisors increased dramatically; from about 900 in January of 1961 to 17,000 by the end of 1963. In his Vietnam memoir, Army general Bruce Palmer called these advisors "unsung heroes," working "unrecognized and unappreciated" at jobs which were "thankless, dangerous, and difficult."

In 1965, then-Captain Schwarzkopf decided, with his country at war, that he as a professional soldier should be doing his part. Despite friends who said advisory duty would do nothing for his career, he volunteered to cut short his instructor tour at West Point so as to serve in Vietnam. His decision to volunteer, he would write, "had nothing to do with careerism. It had to do with ideals."

Arriving in Vietnam, thirty-year-old Captain Schwarzkopf was assigned as one of the advisors to the Vietnamese Airborne Brigade. During an early operation, he and the unit to which he was attached made a long trek into the jungle, after which they camped for several days while a South Vietnamese engineer unit repaired a bridge damaged by the Vietcong. When the job had been completed, the engineers invited the airborne officers and their advisor to a bridge-blessing ceremony. They watched as a pig was slaughtered, after which each man was given a half-glass of Scotch. Their glasses were then filled the rest of the way with blood from the pig.

Schwarzkopf, no doubt recalling his boyish discomfort at the Baluchi feast in Iran, knew what was expected. While the American advisor with the engineers refused to touch his drink, Schwarzkopf, toasting the bridge, drained his glass with a mighty gulp. Later, his Vietnamese counterpart told him that the engineer commander had hoped to embarrass the Americans who were present, and that by his action he had brought great credit to the airborne. Schwarzkopf had passed a test, thereby doing much to cement relations with his Vietnamese comrades.

Before long, another test would arise--one not only more difficult, but with career-threatening implications.

Captain Schwarzkopf studied the order that had just come down from higher headquarters. It looked good--even impressive. When he'd first arrived in Vietnam, things had seemed rather rugged. Now, however, as he read the message and admired the staff work that apparently had gone into it, he nodded his appreciation.

The order called for a mission in support of Major General Vinh Loc, commander of the Vietnamese II Corps. Someone at Vinh Loc's headquarters, no doubt with the help of an American advisor, had spelled everything out precisely in a directive that would have received a high grade at Fort Benning or any of the other U.S. service schools.

A task force under Major Nghi (pronounced "knee"), with Schwarzkopf as advisor, would attack to drive the Vietcong away from the South Vietnamese special forces camp at Duc Co, near the Cambodian border. The camp, set up to prevent infiltrators from slipping into Vietnam from Cambodia, had for weeks been under attack by Vietcong guerrillas, and was more or less under siege.

According to the order, in forty-eight hours Nghi and his men would make a massive helicopter assault, using a landing zone (LZ) seven miles from Duc Co after a preparatory twenty-minute air-strike. That was good: No one wanted a "hot" LZ (one under enemy fire), since helicopters, swift in normal flight, could be sitting ducks when they, slowed, hovered, and touched down. The air strike should take care very nicely of keeping the LZ clear of any Vietcong.

Once on the ground, the order said, the task force would be supported by "all available" artillery. Moving on foot to, the Cambodian border, and under cover of a fighter-bomber "air cap," they would then swing in a wide arc around Duc Co. This should allow them to pinch off the guerrillas, whose strength was an estimated two battalions, about 700 men. Nghi s force should be adequate for the job, but as an added precaution, a South Vietnamese ranger battalion would be standing by to help if needed.

Major-Nghi was something of a question mark. Some said he was weak, that he owed his job to political connections through his brother, a famous war hero. Others said he had never been the same after a painful training accident in which an incendiary grenade, mistaken for a smoke grenade, had gone off in his hand and left him horribly scarred. In any case, Schwarzkopf, as his designated advisor, was

determined to give Nghi the fullest possible support.

Together, Schwarzkopf and the major went over the operations order, planning how they would implement it. Which unit would be assigned to which helicopters? Who would take the lead once they

were on the ground? Where would Nghi and Schwarzkopf position themselves during the operation? How would they call for supporting fire? After working through much of the night, they decided they had a solid and workable tactical plan.

Next morning, with less than twenty-four hours remaining before the scheduled assault, Nghi began to brief his commanders. While he was doing this, Schwarzkopf decided to double-check various elements of the plan. He began by getting with the helicopter flight leader.

First step was flying to Duc Co to check out the landing zone. Taking out his map, Schwarzkopf showed the pilot the clearing they be using. Soon they were in the air and skimming over the jungle, flying low to keep from attracting any ground fire. High-flying choppers, audible from a distance, often gave the Vietcong time to start shooting. A low-flying helicopter, on the other hand, normally had time to come and go before anyone could react. Schwarzkopf kept peering down, trying to detect any ground activity. The lush triple-canopy jungle, however, formed an impenetrable screen. All he could see was solid vegetation. The Vietcong were down there, that was for sure, but only when he was on the ground himself would he learn, and perhaps unpleasantly, just where that was.

They came over the spot designated as the landing zone. Looking down, Schwarzkopf saw only trees where the clearing should have been. He rechecked his map. There must be a mistake; the clear area designated as an LZ was nowhere to be seen. Evidently some staff officer, without checking, had taken a map and marked a spot that looked open, not realizing that in the jungle a clearing could soon become a forest. Schwarzkopf asked the pilot to keep circling until they found a suitable LZ. Finally they found an alternate site, about fifteen miles the other side of Duc Co. The change in LZ site meant the timing of the whole operation would also have to change.

Back on the ground, Schwarzkopf went to the air section at General Vinh Loc's headquarters to coordinate the air strike. The man at the desk, giving him a blank look, said: "We don't know anything about an operation at Duc Co."

Schwarzkopf took out the operations order and pointed out the paragraph indicating a twenty-minute preparation. Yes, it was there all right, but the man insisted they'd never received any such request.

"And by the way," the man added, "if you're going tomorrow, you won't have any air, because we need forty-eight hours to line up the planes."

Schwarzkopf began getting a sinking feeling in his stomach. What was happening here? Well, if there was no air, he'd better get busy and line up lots of artillery support. He hurried to the office of the fire support coordinator, showed the operations order to the two men on duty and explained how crucial fire support would be.

"What artillery is in that area?" he asked.

The men began to laugh. One of them said: "Do you know what 'available artillery is? There's one mortar tube within the special forces camp!"

The second man, grinning, chimed in: "And they have only twenty rounds of ammo left!"

Their humor was lost on Schwarzkopf, who stormed out, fuming. Back at Pleiku, he went into the snack bar to cool off, and there received what appeared to be the first bit of good luck. At a nearby table was Captain Paul Leckinger, a friend from Fort Benning days, and currently an advisor to the South Vietnamese ranger battalion.

Schwarzkopf told Leckinger about the mixed-up operations order and the lack of artillery and air support. It made him appreciate the availability of the Vietnamese rangers. "At least you'll be there if we need you," he said.

Leckinger had the same blank look as the people at the air section.

"What are you talking about? My battalion has just come back from three weeks in the field. We sent them all home to their villages for a break. We couldn't get them back together in less than three or four days."

That hollowness in the stomach was turning more and more into a feeling of panic. This thing was shaping up as a real disaster. Schwarzkopf went looking for the task force commander.

Major Nghi, a somewhat reluctant warrior at best, became visibly shaken when Schwarzkopf told what he'd found: no landing zone where it was supposed to be, no support from either air or artillery, no ranger battalion standing by. It was about seven P.M., and they were supposed to start the attack the next morning.

"What do you advise, Captain?"

"Sir, I advise that we not go! We need a forty-eight-hour delay to sort some of this out." The major quickly agreed.

Nghi first notified his parent unit, the airborne headquarters back in Saigon. Then he placed a call to General Vinh LOC, the man in whose corps zone they d be operating, and the one whose headquarters had issued the order.

Schwarzkopf sat down; he was beginning to feel a little better. Watching Nghi, however, it soon became clear the conversation was not going well. Even from across the room, he could hear Vinh Loc screaming at the hapless Nghi.

Nghi hung up the phone. In a subdued voice, he said they wanted to see Nghi and Schwarzkopf in person. They were to be at General Vihn Loc's house at ten for a special meeting. Vihn Loc, according to Nghi, was a Vietnamese prince, a very powerful person who was used to having people do exactly as he said. And at the moment he was very, very angry.

At the appointed time, Schwarzkopf and Nghi arrived at Vinh Loc's place, an imposing colonial mansion in downtown Pleiku. An aide motioned them to follow, and they were ushered into a large marble-floored hall. At the far end was a dais, behind which sat a row of officers, looking very much like a military tribunal. General Vinh Loc sat in the center, in the place of

honor. Next to him was his American advisor, a full colonel. On either side were several Vietnamese generals and colonels, with *their* American advisors. Two straight chairs had been placed facing the dais. To Schwarzkopf, this looked like an arrangement more suited for prisoners in the docket than for a military conference.

General Vinh Loc, Speaking in Vietnamese, got right to the point. Looking menacingly at Major Nghi, and mincing no words, he shouted: "How dare you say you are not going to attack tomorrow?" Who, he wanted to know, was responsible for this outrage?

Major Nghi, squirming, said that he was willing to attack but had requested a postponement on the advice of his advisor, Captain Schwarzkopf.

Vinh Loc turned to his own advisor, the American colonel, with a look which seemed to imply that he understood: This foul-up was all the fault of the Americans!

The colonel, clearly embarrassed, and not wanting to lose face before the Vietnamese, glared at Schwarzkopf. "Captain, how *dare* you tell them not to attack?"

Schwarzkopf, trying to sound calm, explained that despite what it said in the operations order, they had neither air nor artillery support, nor did they have a reserve. Moreover, they'd had to switch to a new landing zone, which meant they didn't even have a proper ground tactical plan.

Schwarzkopf had been in Vietnam only a month and a half, and this was his first time in combat. Obviously the colonel thought he had no right to question any orders from a higher headquarters.

"For crying out loud," said the colonel, "it's just a couple of VC battalions! And what do you mean, you don't have any air support?" If you get in trouble, we'll divert airplanes from someplace else. That s the way we operate."

Schwarzkopf knew all eyes were focused on him, and not very friendly eyes at that. He was determined not to be intimidated.

Put yourself in Captain Schwarzkopf's shoes. Be prepared to discuss how you would respond in his situation. What has to be done? What kind of information is needed? Who must be contacted? What are your near term objectives?

Sir, I just don't consider that adequate air support."

The colonel, red-faced, was becoming more and more irritated. In a sarcastic voice, he asked: "And just what would you consider to be proper air support?"

For the first time, Schwarzkopf let his own anger show. "Sir, when it's my ass out there on the ground, about a hundred B-52's circling overhead would be just barely adequate. Now, I'm willing to settle for something less, but I'm not willing to settle for nothing."

That did it. The colonel was livid. He went into a tirade, lashing out at Schwarzkopf and his impertinence, at one point telling him he was an embarrassment to the American army. Now what did he have to say for himself?

Schwarzkopf said he still felt the attack should be postponed, at which the colonel replied that Schwarzkopf was obviously unsuited for the job, and he therefore should consider himself relieved of his duties.

Norman Schwarzkopf had grown up in a military family, had been further ingrained at West Point and elsewhere with respect for those in authority. Moreover, he knew that an officer who was relieved from a job, particularly during combat, could kiss his career good-bye. Nevertheless, he felt sure he was right, and despite the bullying, he stood his ground and told the colonel that was an improper order. The only one who could relieve him was his senior airborne advisor, Colonel Francis Naughton.

"Get him on the phone!"

It was now nearly midnight, but somehow they managed to track down Colonel Naughton back in Saigon. Naughton listened to the colonel, who spared no words as he told of his own outrage as well as that of General Vinh Loc. Then Naughton asked to speak to Schwarzkopf, who explained his own side of the story.

There was a dramatic pause. Then Naughton's voice came over the phone. He reminded everyone that this was a Vietnamese airborne unit under the operational control of Saigon. Next he said: "I support Captain Schwarzkopf and my Vietnamese counterpart here supports Major Nghi. All we ask is a forty-eight-hour delay."

With that, Schwarzkopf had become the most unpopular man in Pleiku. Next morning, Colonel Naughton arrived at Vinh Loc's headquarters to help sort things out. Meanwhile, the staff

officers on hand, both American and Vietnamese, kept telling Schwarzkopf he was being overly concerned about "only a couple of measly VC battalions." Clearly they considered him to be a troublemaker, one they'd remember.

Naughton looked over the plans, asked questions, and then announced that Schwarzkopf was right. The operation was postponed for seventy-two hours, much to the relief of Major Nghi and his under-the-gun advisor.

Before leaving, Naughton announced he had one more piece of business. In a stern voice, he called Schwarzkopf forward and had him stand at attention. Nearby staff officers stopped work and grew quiet. Were they about to witness a royal chewing-out?

Colonel Naughton's serious expression turned into a broad smile. Beaming, he reached in his pocket and took out a gold leaf, which he then proceeded to pin on Schwarzkopf's collar. Orders promoting Schwarzkopf to major had just come through, and Naughton had decided this was a mighty appropriate time and place to hold the ceremony.

The new major, grinning from ear to ear, thanked his boss profusely. Not only did he appreciate the support and the promotion, he also thought Naughton showed real class by announcing the promotion at that particular moment, and before a group that considered H. Norman Schwarzkopf to be, in Schwarzkopf's words, "the world's biggest pain in the ass." The promotion was great, of course, but even more important was the fact they d managed to forestall a potential military debacle.

Part 2.

By the time Schwarzkopf had completed his tour in Vietnam, he recognized the difficulty of ever winning an all-out military victory. And, like other advisors, though he was fully committed to the struggle he had also come to resent the overly optimistic reports emanating from higher headquarters.

Schwarzkopf returned to the States to complete his West Point instructor assignment and to attend the Army's Command and General Staff College at Fort Leavenworth. He then volunteered to go back to Vietnam for a second tour. In 1970, at the end of that tour, he wrote: "The Army had not only reached its nadir but also lost the confidence of the American people. I agonized over the question of whether to stay in and decided I would, in the hope of someday getting to help fix what I thought was wrong."

Schwarzkopf's ability to "fix what was wrong" of course depended in large part on attaining some degree of seniority. Over the next eighteen years he worked hard, distinguished himself in a series of important assignments, and was rewarded by continued promotion. Finally, in the summer of 1988, he learned he was in line to receive his fourth star. Even so, things did not come easily.

Schwarzkopf had requested an assignment as head of Central Command, or Centcom, the military organization with responsibility for the Middle East. In the past, the job had alternated between the Marines and the Army, so when Schwarzkopf was nominated to replace the current incumbent, Marine general George Crist, It seemed likely the post would go to him. However, while the Army and the Air Force supported Schwarzkopf's nomination, the Navy and the Marines supported a Navy admiral for the job. The Chairman of the Joint Chiefs, Admiral William Crowe, although submitting both names to Secretary of Defense Frank Carlucci for consideration, had sent along a note of personal support for the admiral. It didn't look good for Schwarzkopf. However, after a successful interview with Carlucci, Schwarzkopf was given the assignment. In November 1980, he received his fourth star and took over as head of Central Command, with headquarters at MacDill Air Force Base near Tampa.

Over the next few months, as he visited with foreign leaders, both civil and military, Schwarzkopf began to appreciate even more the importance of America's role in the Middle East. Then, after studying the Centcom mission, he concluded that current contingency plans were outdated and began drafting new ones. His predecessor, General Crist, had had similar ideas. Crist had told *The New York Times* in an interview that preparing mainly for a Soviet thrust into Iran was an outmoded strategy. What the United States needed, Crist had said, was the flexibility to deal with other potential threats in the region. Schwarzkopf definitely agreed with this, and when revised plans were drawn up, he discussed them with top civilian strategists in the Pentagon. Happily, his ideas were also concurred in by his four-star colleague, General Colin Powell, who many felt would be the next Chairman of the Joint Chiefs of Staff.

Meanwhile, however, the present Chairman, Admiral Crowe, was preparing his own recommendations of military strategy for delivery to the Congress. His first draft, when circulated to the Joint Chiefs for comment, made no provision whatever for the Middle East. The premise,

circulated to the Joint Chiefs for comment, made no provision whatever for the Middle East. The premise, apparently, was that American resources should be reserved only for the continental United States, NATO, and the Pacific.

Schwarzkopf naturally was dismayed by the omission and by what he considered its shortsightedness. He argued and tried to make his point with fellow military people, but got nowhere. The Chairman himself had approved the plan, and Schwarzkopf wasn't even able to arrange a face-to-face meeting with Admiral Crowe to voice his concerns.

Fortunately, when the plan reached the secretary of defense—now Dick Cheney—for comment, those same civilian strategists Schwarzkopf had consulted earlier called him and asked if the general agreed with it.

"Of course not!" growled Schwarzkopf, who made it clear he d been stonewalled. The problem was then presented to Secretary Cheney, who immediately ordered the Middle East to be written in.

In late July 1989, Centcom began a "command post exercise," code-named Internal Look, to test the new plan. A mock headquarters was set up and dummy messages were dispatched, with a scenario based on a hypothetical attack by an aggressor nation against other Arab states, with consequent danger to Mideast oil fields. Participants had no trouble identifying the unnamed aggressor as Iraq, which had by this time become one of the world's strongest and most belligerent military powers.

Incredibly, as Internal Look was taking place, parallel events were occurring in real life. Saddam Hussein was complaining that Kuwait was infringing on the Iraqi portion of the Rumaila oil field that straddled the two countries. Iraqi divisions were massing on the Kuwaiti border, and invasion seemed imminent. Many; of course, still viewed all this as a bluff; most Arab nations, as well as the U.S. State Department, found it inconceivable that Iraq would consider attacking fellow Arabs.

Then, on August 2, less than a week after the conclusion of Internal Look, Saddam Hussein did what the exercise had anticipated. Iraqi forces stormed into Kuwait. Colin Powell, by this time Chairman of the Joint Chiefs, called Schwarzkopf and said: "Well, you were right. They've crossed the border."

Schwarzkopf ordered contingency plans to be set in motion, then flew to Washington to assist in briefing President Bush. Diplomatic wheels were turning. At the United Nations, the invasion was condemned and a resolution was passed demanding immediate Iraqi withdrawal.

American President George Bush said Iraq's aggression would not be allowed to stand: "Nobody is willing to accept anything less than total withdrawal of the Iraqi forces and no puppet regime." Saudi Arabia, still shocked by the invasion, and now fearing for its own safety, agreed to have United Nations forces stationed on Saudi territory.

brigade of the 82nd Airborne Division. While planes and troops went by air, heavier equipment was being loaded concurrently for travel by sea. As days went by, and the buildup continued, Schwarzkopf began to relax a little—Saddam had missed his chance to score an easy, unopposed victory. By mid-September, Centcom forces were in position to defend Saudi Arabia and the immediate threat of further invasion had lessened. Centcom, however, was a long way from being able to take the offensive. In fact, during a meeting at Camp David right after the Iraqi invasion, Schwarzkopf had explained that his plans were designed initially only for the defense of Saudi Arabia. At the Same meeting, he had shocked his listeners by telling them that to go on the offensive would take a lot more troops and a lot more time, probably eight to ten months.

A few days after that, and only a week into Desert Shield, Chairman Colin Powell had startled Schwarzkopf by asking him how he'd go about it if he had to kick the Iraqis out of Kuwait "right now."

"I couldn't!" said Schwarzkopf. "I've made it clear to everyone that we aren't sending enough forces to do that."

"Suppose you were ordered to."

Hastily, Schwarzkopf sketched out a rough outline of how he'd attack, again stressing that his planners had told him it couldn't be done successfully with the force on hand. An attack would be a calamity.

Even so, Powell kept the sketch, and later told Schwarzkopf: "I've shown your plan to the President."

Schwarzkopf was dumbfounded. "Wait a minute," he said, "that's not my recommendation!" He remembered Vietnam all too vividly, and the way commanders had frequently misled their leaders and the American people by their confident assertions.

"Don't worry, Norm," Powell said. "I just used it as an illustration." Fortunately the two had a solid, trusting relationship, one in which Schwarzkopf had a free hand in the field while Powell, the link to the President and the secretary of defense, handled things in Washington.

Before leaving the States for his headquarters in Riyadh, Schwarzkopf had met again with Powell on a Saturday morning in the nearly deserted Pentagon. He had sketched out a plan for a possible air campaign against Iraqi forces, but had again stressed that launching the existing ground forces into Kuwait seemed no less foolish than it had before. He had also talked with General Denny Reimer, the Army operations deputy; and said he needed to be sure some people in Washington were willing to stand up and be counted—to say how dumb it would be to let ourselves be pushed into something we weren't ready for or capable of doing.

Through the rest of the summer, and into the fall of 1990, the Gulf buildup continued. Meanwhile, Saddam Hussein had announced Iraq s "annexation" of Kuwait. A day later, the

United Nations passed a resolution, the first of many, denouncing Iraqi aggression and rejecting the idea of annexation.

By this time, big C-5 Galaxy transports and smaller C-14l StarLifters were landing in Saudi Arabia every ten minutes at the Dhahran air base. Ships were also starting to arrive at the port of Dammam. Norman Schwarzkopf was now working eighteen-hour days, making decisions about troop deployments, about the logistic buildup, about commitments from his UN allies, about ensuring that Americans exposed to a foreign culture did nothing to offend their Saudi hosts. He was hard on himself, and hard on his staff, to the point that many in the headquarters, while respecting his results, came to resent his rough, impatient manner and his perfectionist demands. In the field, however, his concern for the troops and attention to detail paid off handsomely in efficiency, morale, and personal popularity.

Now that there was a solid defensive capability, while Saddam Hussein continued to resist all calls for withdrawal, Schwarzkopf new there was a real possibility they'd be called on to attack. He invited planners from the States to help him develop an offensive plan. So far Desert Shield had been concerned with defense. To keep this new offensive contingency separated in everyone s mind, they decided to give it a new name. When the United States and its allies went on the attack, Desert Shield would become Desert Storm.

The Stateside team, from the School of Advanced Military Studies, came up with a plan similar to that Schwarzkopf had sketched out earlier. It assumed a preliminary air campaign followed by a ground offensive, and involved an attack straight into Kuwait to seize the critical highway junction north of the capital. The plan had the allies going right into the teeth of Iraqi defenses and would doubtless involve heavy casualties. The SAMS team predicted (too optimistically, in Schwarzkopf's opinion) some 8,000 wounded and 2,000 dead for the U.S. forces, and that didn't even consider the potential mass casualties if Iraq used its chemical weapons. Schwarzkopf now liked the plan even less than when he'd envisioned it himself.

Although he was constantly busy with a million pressing details, he never forgot the most important thing of all: safeguarding the lives of the men under his command. "Every waking and sleeping moment," he told a group of journalists, "my nightmare is the fact that I will give an order that will cause countless numbers of human beings to lose their lives. I don t want my troops to die. I don t want my troops to be maimed. It s an intensely personal, emotional thing for me. Any decision that you have to make that involves the loss of human life is nothing you do lightly. I agonize over it."

A few people worried about that particular interview, fearing the public might be concerned about a commander who suffered mental anguish. Even Schwarzkopf's friend Colin Powell suggested he might try to avoid so much candor when discussing personal matters. However, the American people were apparently undisturbed, even seeming to appreciate a general who felt as Schwarzkopf did.

The troop buildup continued. However, it was still far from complete when a call came from General Powell asking Centcom to send a team to brief Secretary of Defense Cheney, the Joint Chiefs, and possibly the President on the plans for Desert Storm.

"I gotta tell you," said Schwarzkopf, "as far as a ground offensive is concerned, we've still got nothing."

"Well, your air offensive plan is so good that I want these people to hear it. But you can t just brief the air plan. You have to brief the ground plan too."

Once again, put yourself in General Schwarzkopf's shoes. Be prepared to discuss how you would respond in his situation. What has to be done? What kind of information is needed? Who must be contacted? What is your next step? What is your approach?

Schwarzkopf, describing his feelings at that moment, later wrote: "I got a sinking feeling in, my stomach. . . . I suspected Washington was finally about to confront the question of what came next. My old fear returned that we d be ordered to do something foolish."

Schwarzkopf asked if he could conduct the briefing himself, but was told his return to Washington might start too many rumors. He thought that was a mistake; other commanders, from Eisenhower to Westmoreland, had been called back for meetings, and now he was under orders to send in a plan he "believed could result in a blood bath."

This was a crucial moment. The easiest course, one that could never be faulted either personally or professionally, would be to out-line his capabilities, both strengths and weaknesses. Then, if he were ordered to launch an attack with present force levels, it would be someone else's responsibility, not his. It was obvious that many of the key people back home would welcome a bit of self-confident bravado on Schwarzkopf's part. In fact, if he sounded too cautious, there was always a chance he might he replaced by someone who said what people wanted to hear. However, he was damned if he'd repeat the mistakes of Vietnam. He still remembered all those rosy predictions by people who "saw the light at the end of the tunnel."

Unhesitatingly, Schwarzkopf chose a course he knew to be right. When he met with those who were to return and present the briefings, he set down firm guidelines. They were to explain Centcom capabilities, but they were not to tell the President anything beyond that.

There'd be no speculating or giving of personal opinions, no showboat "can do" attitude. If anyone exceeded those instructions, Schwarzkopf assured them they'd be relieved of their duties and sent home.

The briefing was given exactly as ordered. As the final step, and on specific instructions from Schwarzkopf, three summary slides were shown:

The briefing was given exactly as ordered. As the final step, and on specific instructions from Schwarzkopf, three summary slides were shown:

CINC'S ASSESSMENT

- Offensive ground plan not solid. We do not have the capability to attack on ground at this time.
 - Need additional heavy corps to guarantee successful outcome.
- Defensive plan solid—as promised the president during the first week in August, United States Military Forces are now capable of defending Saudi Arabia and executing a wide range of retaliatory attacks against Iraq.

In general, the briefing went well. General Robert B. Johnston, the key briefer, told Schwarzkopf that by the time of the final summary, most of the key points had already been covered and understood. Nevertheless, when the final slide was shown, one of the President's key advisors was heard to say, "My God, he s already. got all the force he needs. Why won't he attack?"

When he heard that, Schwarzkopf phoned Colin Powell to ask if that had really been said. "That s right," Powell told him. "Somebody even said, 'Schwarzkopf is just another McClellan." The reference was to George McClellan, a Civil War general who was notorious for having "the slows" and for being overly cautious. The hawkish civilian who made the remark evidently had been watching Ken Burns' excellent Civil War series on public television and now considered himself something of a military expert. Powell, however, assured Schwarzkopf of not only his own full support but also that of the President. Schwarzkopf would get what he needed to "do it right."

Despite all the diplomatic maneuvers and the sanctions, Iraq remained defiant. On January 17, 1991, the last UN deadline for withdrawal had come and gone. It was time to force Sadam Hussein out of Kuwait. Meanwhile, thanks to the providing of additional forces, Centcom had developed a new and far better tactical plan.

In the headquarters war room, Schwarzkopf read his message to the troops: "Our cause is just. Now you must be the thunder and lightning of Desert Storm. May God be with you, your loved ones at home, and our country."

A tape was played of Lee Greenwood singing "God Bless the USA," which had become something of an unofficial anthem. Then Schwarzkopf said brusquely: "Okay, gentlemen, let's go to work."

Desert Storm began with a devastating and highly successful air campaign. Five weeks later, over 100,000 sorties had been flown, cutting Iraqi communications and isolating the front lines.

with a preponderance of power, was made far to the west, in a brilliantly conceived wide envelopment. Less than three days later, Iraq informed the United Nations that it had accepted the Security Council resolutions.

Norman Schwarzkopf had risked a great deal by holding out for more troops and resisting a premature, "straight-ahead" offensive. He had been called "another McClellan"; with different leaders, he might even have ended up like McClellan, relieved of his command. However, he had stuck to his principles, and with the support of those who believed in him, he had achieved a brilliant tactical and strategic success with but a handful of friendly casualties. His decision had not only been proven correct, it had also been the right thing to do.

************************** Compare your approach to that of General Schwarzkopf s. How does your experience guide you to your particular approach? Think back to the alternative decision making approaches. What do you think General Schwarzkopf s approach was? And what was your s?